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Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources Materials. Supplement III (1980)

Ohio State Univ., Columbus

Prepared for

National Training and Operational
Technology Center, Cincinnati, OH

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16. ABSTRACT

Presented are abstracts and indexes to selected print and non-print materials related to wastewater treatment, water quality, and water resources education and instruction. Entries are included from all levels of governmental sources, private concerns and educational institutions. Each entry includes: title, author, cross references, descriptors, and availability. Also included are procedures illustrating how instructors and program developers in the water quality control field can locate instructional materials to meet their needs. (BT)

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Abstracts, bibliographies, books, data retrieval, education, indexes (documentation), information retrieval, information systems, specialized training, technical reports, visual aids, water pollution, water quality, water resources.	Instructional materials	05 B 13 B

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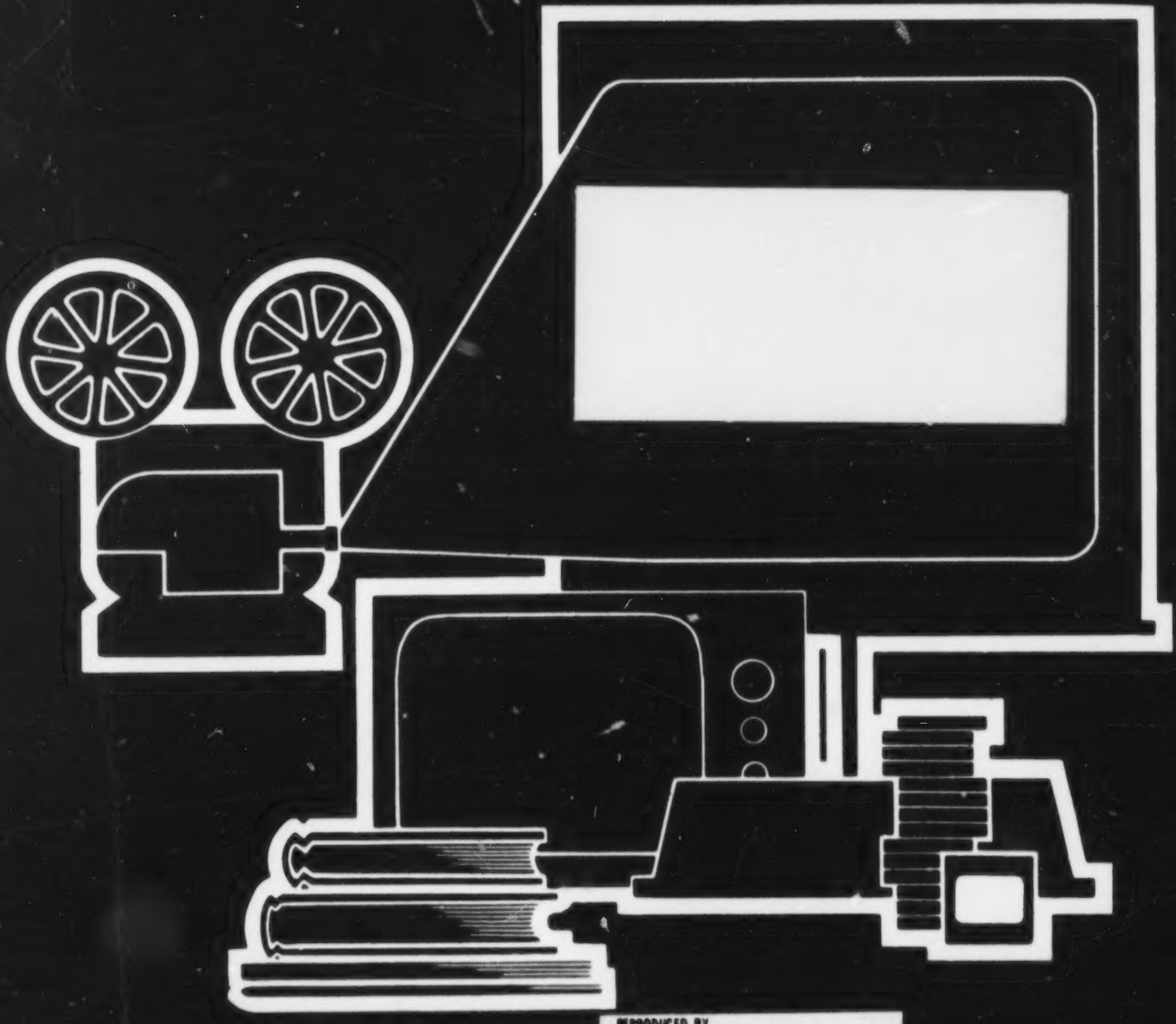

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WATER QUALITY INSTRUCTIONAL
RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to Water Quality and Water Resources Materials

Supplement III (1980)
July, 1980

Compiled by the staff of the
EPA Information Dissemination Project
SMEAC Information Reference Center
1200 Chambers Road - 3rd Floor
Columbus, Ohio 43212

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Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

EPA Information Dissemination Project
1200 Chambers Road
Columbus, Ohio 43212

Phone: 614-422-6717

I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The EPA Information Dissemination Project (water) acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the EPA Information Dissemination Project is the source of the materials.

B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

EPA Information Dissemination Project
1200 Chambers Road
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the material is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this compilation, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EPA Information Dissemination Project at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) Collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of this compilation and similar ones to follow and (2) by computer.

The first compilation contained resumes of selected materials processed for the previous IRIS (water) collection and resumes of selected materials of items added to the IRIS (water) collection. A limited number of copies of the compilation in paper copy and microfiche are available free of charge as long as the supply lasts from the EPA Information Dissemination Project. After the free copies of the compilations are gone, copies will be available for purchase from the EPA Information Dissemination Project.

Quarterly updates of the compilation are available by subscription on a yearly basis beginning November, 1979. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EPA Information Dissemination Project. A subscription to the quarterly supplements for 1979-80 is $12.00 (within the U.S.). Price to Canada is $14.00. Prices in other countries is $20.00. Separate quarterly supplements are $4.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched by both batch and on-line computer searches. The IRIS tapes are available for purchase from the SMEAC Information Reference Center. In addition, the IRIS tapes are available for searching through the Bibliographic Retrieval Services, Inc., (BRS). Any search service that currently subscribes to BRS is able to search the IRIS data base by on-line techniques. Individuals or agencies with computer terminals and telephone connection equipment can subscribe to BRS and do their own searches if they desire. Current plans are to update the IRIS tapes every three months.

Information regarding BRS may be obtained by writing or phoning BRS, Corporation Park, Building 702, Scotia, NY 12302, (518) 374-5011.

Plans are being made to mount IRIS tapes with other on-line vendors. Information regarding this service will be announced in a future EPA IRC Bulletin and in mailings from the EPA Information Dissemination Project.

2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not contact the EPA Information Dissemination for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but most users of the tapes gain access to them through three major database vendors, Lockheed (Dialog), Systems Development Corporation (Orbit), and Bibliographic Retrieval Services. For the addresses of search services in your state that can search these databases, contact the:

EPA Information Dissemination Project
1200 Chambers Rd., Room 310
Columbus, Ohio 43212

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EPA Information Dissemination Project for 3¢ per page + $1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EPA Information Dissemination Project.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
3930 East Camelback Road
Phoenix, Arizona 85018

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. Current prices are $6.00 for articles published before January 1976 and $4.00 for articles published after January 1976. For further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106

II. How to Use the Compilation

A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered in ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered into ERIC

a. IRIS NUMBER: EW004410
b. PUBLICATION DATE: 1979
c. TITLE: DESIGN OF LAND TREATMENT SYSTEMS FOR INDUSTRIAL WASTES--THEORY AND PRACTICE.
d. PERSONAL AUTHOR: OVERCASH, MICHAEL RAY; PAL, DHIRAJ
e. DESCRIPTOR: CHEMICAL ANALYSIS; COST EFFECTIVENESS; *DESIGN; ENVIRONMENTAL INFLUENCES; *ENGINEERING; GUIDELINES; HYDRAULICS; INDUSTRY; *INDUSTRIAL WASTES; *LAND USE; *LAND APPLICATION; SOILS; *TECHNOLOGY; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

f. DESCRIPTIVE NOTE: 684P
g. ABSTRACT: PRESNETED IN THIS BOOK IS THE TECHNICAL AND ENGINEERING BASIS FOR THE DESIGN OF LAND TREATMENT SYSTEMS BY MEANS OF A UNIFIED APPROACH. TOPICS DISCUSSED INCLUDE: FUNDAMENTAL DESIGN BASIS; TOTAL DESIGN PROCEDURES; CATEGORIES OF WASTES; PRETREATMENT OF IN-PLANT SOURCE CONTROL; ECONOMIC ANALYSES; AND EXAMPLE SYSTEMS.

h. AVAILABLITY: ANN ARBOR SCIENCE PUBLISHERS, P. O. BOX 1425, ANN ARBOR, MI 48106. (PRICE: $35.00)

a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.

b. PUBLICATION DATE -- date material was published according to information on the material.

c. TITLE

d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.

e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed.

g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.

h. AVAILABILITY -- information in this field indicates where the material can be obtained and the price of the material quoted the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.

2. Sample resume of material entered into ERIC (Resources in Education)

Item entered into ERIC (Resources in Education) will have a few additional data fields.

IRIS NUMBER: EW002998
a. ERIC NUMBER: ED151236
PUBLICATION DATE: SEP 77
TITLE: CHLORINATION. TRAINING MODULE 2.300.2.77.
INSTITUTION CODE: BBB08399
SPONSORING AGENCY CODE: BBB15379; FGK21436
DESCRIPTOR: *CHEMISTRY; *INSTRUCTIONAL MATERIALS; *POST SECONDARY EDUCATION; SECONDARY EDUCATION; *TEACHING GUIDES; *UNITS OF STUDY; WATER POLLUTION CONTROL; *CHLORINATION; *WASTE WATER TREATMENT; WATER TREATMENT
b. EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE
DESCRIPTIVE NOTE: 60P. FOR RELATED DOCUMENTS, SEE SE 024 025-046
c. ISSUE: RIEJUL78
ABSTRACT: THIS DOCUMENT IS AN INSTRUCTIONAL MODULE PACKAGE PREPARED IN OBJECTIVE FORM FOR USE BY AN INSTRUCTOR FAMILIAR WITH CHLORINE. THE REASONS FOR CHLORINATION AND SAFE OPERATION AND MAINTENANCE OF GAS CHLORINE, DRY CALCIUM HYPOCHLORITE AND LIQUID SODIUM HYPOCHLORITE CHLORINATION SYSTEMS FOR WATER SUPPLY AND WASTEWATER TREATMENT FACILITIES ARE GIVEN. INCLUDED ARE OBJECTIVES, INSTRUCTOR GUIDES, STUDENT HANDOUTS AND TRANSPARENCY MASTERS. THE MODULE CONSIDERS PURPOSES OF CHLORINATION, PROPERTIES OF CHLORINE, METHODS OF CHLORINATION, SAFETY, MAINTENANCE OF CHLORINATION UNITS AND INTERPRETATION OF TEST RESULTS. (AUTHOR/RH)
d. INSTITUTION NAME: KIRKWOOD COMMUNITY COLL., CEDAR RAPIDS, IOWA.
SPONSORING AGENCY NAME: DEPARTMENT OF LABOR, WASHINGTON, D.C.; IOWA STATE DEPT. OF ENVIRONMENTAL QUALITY, DES MOINES.

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can also be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
P.O. Box 190
Arlington, Virginia 22210

Telephone: 703-841-1212

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EPA Information Dissemination Project.

c. ISSUE -- this indicates the monthly issue of Resources in Education in which the resume appeared.

d. INSTITUTION NAME -- organization where document originated.

B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index, Author Index, Institution Index, or Title Index.

1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to laboratory techniques and to wastewater treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence they are not listed in this index.

3. Title Index to the IRIS Compilation (Not included in the compilation)

The Title Index to the IRIS Compilation is a separate document. It is available from the EPA Information Project for $5.00 prepaid or $5.00 plus postage if invoiced. Supplements will be available on an annual basis for $5.00 beginning in January, 1981.

The Title Index contains all titles in the compilation listed in alphabetical order. If you are searching for material and know the title, you can check the title list to determine if the item is in the IRIS data base. Each title includes the IRIS resume number. The number can be found in the resume section of the compilation.

III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EPA Information Dissemination Project
1200 Chambers Road, Rm. 310
Columbus, OH 43212

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the souces to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about six times a year as information is available.

If you are not on the mailing list write to the EPA Information Dissemination Project. Limited numbers of some back issues are still available.

If you need information about IRIS you can also phone 614-422-6717 with your questions.

V. Requests for Assistance in Using IRIS

A. Assistance in use of IRIS manuals.

If you need help in using the IRIS manuals phone 614-422-6717 or write to the EPA Information Dissemination Project. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

B. Assistance in accessing IRIS by computer

1. Conducting searches.

   See section VIII.

2. Subscribing to BRS, Inc. for computer searching of IRIS

   Contact: Bibliographic Retrieval Services, Inc.
   Corporation Park, Building 702
   Scotia, New York 12302

   Phone: 518-374-5011

3. Contacting a computer search service (an agency that will conduct a search for you, usually for a fee)

   The EPA Information Dissemination Project maintains a list of agencies that can conduct searches. Most charge a fee, though some are free to qualified users in a limited geographical area.

   Phone or write to obtain information for your area.

VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EPA Information Dissemination Project plans to develop some user service products in selected areas in 1980.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse for Adult, Career, and Vocational Education
Ohio State University
Center for Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabiliation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education Building, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings,theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary & Early Childhood Education
University of Illinois
College of Education
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research, and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management
University of Oregon
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, goverance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. ERIC Clearinghouse for Junior Colleges
University of California
Powell Library, Room 96
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1611 North Kent Street
Arlington, Virginia 22209
Telephone: (703) 528-4312

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English for speakers of other languages.

J. ERIC Clearinghouse on Reading and Communication Skills
National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics, and Environmental Education
Ohio State University
1200 Chambers Road, Third Floor
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education
One Dupont Circle, NW, Suite 616
Washington, DC 20036
Telephone: (202) 293-7280

School personnel at all levels; all issues from selection through preservice and inservice preparation and training to retirement; curricula; educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, New Jersey 08540
Telephone: (609) 921-9000 ext. 2176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects or programs.

P. ERIC Clearinghouse on Urban Education
Box 40
Teachers College, Columbia University
525 W. 120th Street
New York, New York 10027
Telephone: (212) 678-3437

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences); education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics; structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center
Central ERIC
National Institute of Education
Washington, DC 20208
Telephone: (202) 254-5555

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

VII. How to Structure a Computer Search of IRIS

This explanation relates to the IRIS data base that can be searched on-line through Bibliographic Retrieval Services, Inc. As IRIS becomes available through other sources, information relevant to those services will be provided.

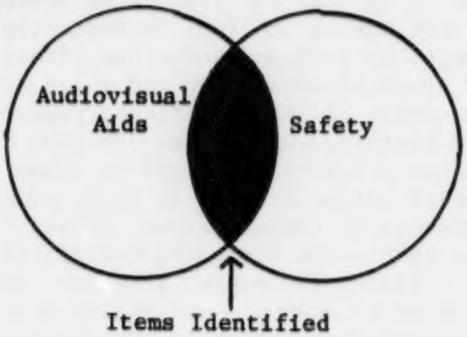
A few notes about the service are important. The following fields are searchable by computer: (1) IRIS Accession Number (EW number), (2) ERIC Accession Number (ED number), (3) Authors, (4) Institution (5) Title, (6) subject index terms, and (7) abstract.

If you submit a search of IRIS through BRS, the program will search for the words you select in three fields unless the searcher requests to limit the search. These fields are: (1) the title field, (2) the subject index field, and (3) the abstract. We recommend you use this feature especially for searches on specific terms. If you find more material than you want by this technique you can narrow the search to items that may have the most information on the topic by limiting the search to the subject index field.

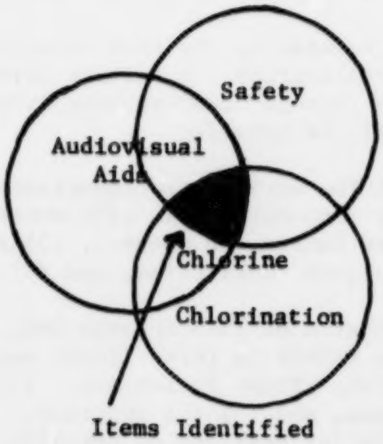
Several sample searches are listed.

A. Sample 1

If you want to locate audiovisual aids that relate to safety you would submit a search with audiovisual aids and safety. Materials that included the terms both audiovisual aids and safety in the title field, the abstract, and the subject index field would be identified by the computer.

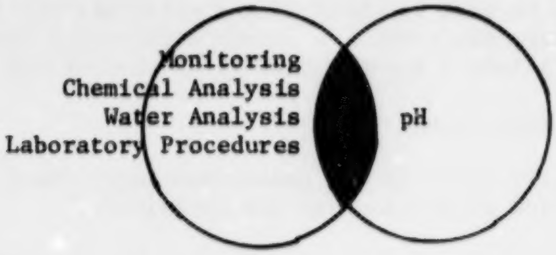

Audiovisual Aids
Safety
Items Identified

The computer program can tell you the number of items, the title of the items, or print the entire resume of each item. If you were primarily interested in audiovisual aids, safety, and chlorine you would submit a search of these three terms. You might want to include chlorides and chlorination as well as chlorine in the search. This search would identify materials that contained audiovisual aids, safety, and one or more of the words, chlorine, and chlorination.


Safety
Audiovisual Aids
Chlorine
Chlorination
Items Identified

B. Sample 2

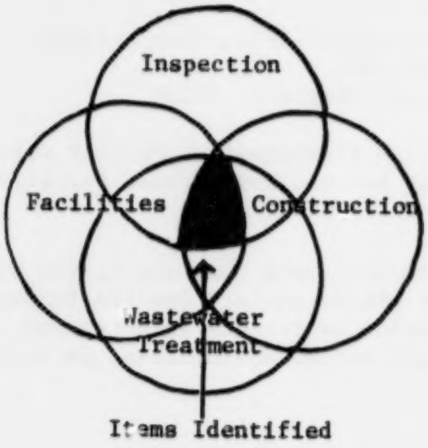
If you want to identify materials related to monitoring, you should include several related terms and the chemical, material, or situation that is being monitored. See the example below.


Monitoring
Chemical Analysis
Water Analysis
Laboratory Procedures
pH

This search would identify all the items that included any of the terms on the left and pH.

C. Sample 3

If you are interested in materials related to inspection and construction you could conduct a search of these two terms. The search would identify all materials that included both terms. If you were interested in only wastewater treatment facilities you could construct a search as diagrammed.


Inspection
Facilities
Construction
Wastewater Treatment
Items Identified

This search would yield specific materials and demonstrates how a computer search can help you locate materials you want.

D. Use of the Subject Index

The subject index in the back of the compilation can be used to help you decide if you want to do a computer search. If there are relatively few entries, you can check the resumes in the resume section. If there is a large number of entries (perhaps 50 or more) you may want to use a computer search.

As the data base gets larger, you will find more entries for subject index terms and computer searching will offer more advantages.

The subject index can also be used to help you select words to include in a search. Words listed in the subject index are certain to be in the searchable fields. Therefore, selecting these terms to use in structuring a search will increase the probability of locating materials. Some words will appear in the title or abstract that are not included in the subject term field. Such words can be used to check if any materials are in the data base. If, however, you conduct a search with such a word it is usually best to include a synonym that _is_ in the subject index.

VIII. How to Order Materials

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

A. A number of audiovisual materials can be obtained on loan from the EPA National Training and Operational Technology Center, Cincinnati, Ohio 45268. They also offer a copy service to reproduce materials at a very reasonable price.

B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Virginia 22210

C. The EPA Information Dissemination Project will provide xerox copies of materials that are not copyrighted for $1.00 per document plus $0.03 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EPA Information Dissemination Project. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

IX. USEPA
National Training and Operation Technology Center
Cincinnati, Ohio 45268

To fulfill national educational and training requirements, USEPA has organized the National Training and Operational Technology Center (NTOTC). NTOTC has the responsibility for planning, developing, conducting and evaluating USEPA's water pollution control training and education program. As an instructional resource, its purpose is to help regions, states, local governments and educational institutions to become knowledgeable about USEPA's goals, regulations, strategies, as well as the implications of USEPA programs which affect virtually everyone.

Activities encompass three categories: (1) instruction; (2) course development; and (3) information management.

Instruction--NTOTC offers a variety of training courses in water quality control. Such courses are taught at many locations, but most are presented at the Environmental Research Center in Cincinnati, Ohio. A current project will expand this effort to enable more environmental personnel to receive specialized instruction. Area training centers will soon act as satellites to the NTOTC program, offering similar courses and instructional support. Select universities with broad pollution control curricula will act as area training centers within a region. As a result, more pollution control personnel will have access to needed specialized training.

Since 1971, the NTOTC professional staff of chemists, biologists and engineers has presented nearly 350 courses to more than 8,000 students. Courses are offered throughout the year, and are designed to help participants understand current pollution control techniques and procedures. As USEPA regulations and policies are implemented, based in large part on USEPA research, courses are offered by NTOTC staff to upgrade knowledge and develop specific skills or procedures.

Some courses are conducted at wastewater treatment plants, enabling USEPA to work directly with plant personnel to improve treatment plant effluent. While working on site at treatment plants, staff can diagnose and discuss particular problems and can provide information on design and operation to many technicians within the local region.

Courses currently are offered in five general categories: wastewater treatment technology, treatment facility evaluation and inspection, water quality surveillance and monitoring, water quality analysis, and drinking water quality monitoring.

Students attend courses from all states, and from some foreign countries. The largest percentage represent federal, state, and municipal pollution control agencies. A relatively small number of college and university instructors attend these short courses which are typically one week in length. USEPA encourages more participation by the educational community, so that current skills and knowledge will be transmitted to students to enable them to deal with pollution control problems as they enter environmental occupations. Community college and university instructors may attend courses free of charge by following prescribed application procedures.

Course Development--NTOTC is active in the field of course development. As new educational and training needs are identified, appropriate instructional packages are developed. Almost all such development is based on current research and agency regulations. Materials include instructor guides, student manuals and supporting audiovisual materials. If USEPA's pollution control training programs are to be successfully implemented, college and university staff from various departments must cooperate and integrate these instructional activities within their curriculums; or students will not be adequately prepared, either theoretically or practically.

Information Management--The goal of USEPA's information management system is to support, in a comprehensive and systematic manner, those involved with pollution control education and training. A central location within the NTOTC facility is designed to provide a contact point and to coordinate assistance efforts and has been designated the Instructional Resources Center (IRC).

As the education and training community has become more aware of the types of programs operated by the IRC, requests for information have expanded dramatically. Many requests for assistance from instructors, information specialists, municipal water and wastewater treatment plant trainers, and representatives of government and business have been received.

Through the IRC, NTOTC maintains a central location to inventory, evaluate, catalog and disseminate instructional materials in the areas of water pollution control, water supply, and pesticides. Composed of several different but interrelated activities, it acts as a primary communications link between USEPA and educators at all post-secondary levels.

The IRC includes an audiovisual lending library housing slide/tape presentations, films and videotapes, all available for free, short-term loan. Most subject areas available are water quality-oriented.

Interested persons are invited to Cincinnati to use IRC facilities for reviewing tapes, slides, films, and other materials before deciding about purchases or curriculum development requirements. IRC staff assist visitors by determining the most appropriate ways to use the Center's resources, or in determining educational and training program requirements and available resources. During the past year, universities and state and local governments have been assisted with curriculum design, course materials selection, and audiovisual support efforts.

For more information on NTOTC write to the center at the following address:

National Training and Operational
Technology Center (NTOTC)
26 West St. Clair
Cincinnati, Ohio 45268

Telephone: (513) 684-7501

RESUME SECTION

IRIS ACCESSION NUMBER: EW000469

PUBLICATION DATE: 64

TITLE: OPERATION AND CONTROL OF WATER TREATMENT PROCESSES.

PERSONAL AUTHOR: COX, C. R.

DESCRIPTOR: *DEVELOPING COUNTRIES; *OPERATIONS (WATER TREATMENT); *PUBLIC HEALTH; *WATER TREATMENT; *WATER SUPPLY; WATER RESOURCES

DESCRIPTIVE NOTE: MONOGRAPH 49

ABSTRACT: PRESENTS COMPREHENSIVE INFORMATION ON THE TREATMENT AND CONTROL OF WATER FOR DOMESTIC PURPOSES. THE AUTHOR DEALS WITH THE CONSERVATION OF WATER RESOURCES IN ORDER TO MAKE TREATMENT EFFECTIVE AND ECONOMIC AND DISCUSSES THE FOLLOWING TREATMENT PROCEDURES: AERATION, TASTE AND ODOR CONTROL, COAGULATION AND FLOCCULATION, SEDIMENTATION, FILTRATION AND CHLORINATION. STANDARDS OF POTABLE WATER QUALITY ARE SUMMARIZED, WITH SPECIAL REFERENCE TO WATERBORNE DISEASES.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW000493

PUBLICATION DATE: 76

TITLE: READING ASSIGNMENTS AND EXERCISES FOR WATER SYSTEM OPERATORS.

DESCRIPTOR: AERATION; BACTERIA; CHEMISTRY; CHLORINATION; COAGULATION; CORROSION; FLUORIDATION; FILTRATION; *INSTRUCTIONAL MATERIALS; LABORATORY TESTS; MAINTENANCE; MATHEMATICS; *OPERATIONS (WATER); SEDIMENTATION; *SAFETY; *WATER TREATMENT; *WATER SUPPLY

ABSTRACT: GUIDE USED WITH NEW YORK MANUAL FOR WATER PLANT OPERATORS.

AVAILABILITY: MT BOARD OF CERTIFICATION FOR WATER AND WASTEWATER OPERATORS, CAPIOL POST OFFICE, HELENA, MT. 59601.

IRIS ACCESSION NUMBER: EW000884

PUBLICATION DATE: 67

TITLE: TREATMENT AND DISPOSAL OF WASTES: REPORT OF A WHO SCIENTIFIC GROUP.

DESCRIPTOR: BIBLIOGRAPHIES; *MANAGEMENT; *PUBLIC HEALTH; *SOLID WASTES; *WASTE DISPOSAL; WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

ABSTRACT: CONSOLIDATES INFORMATION ON MANY TECHNICAL AND ADMINISTRATIVE ASPECTS OF THE COLLECTION, TREATMENT, REUSE, AND DISPOSAL OF LIQUID AND SOLID WASTES. A SELECT BIBLIOGRAPHY OF WORKS ON THE MANAGEMENT OF WASTEWATER AND SOLID WASTES IS ANNEXED TO THE REPORT.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001252

PUBLICATION DATE: 58

TITLE: EXCRETA DISPOSAL FOR RURAL AREAS AND SMALL COMMUNITIES.

PERSONAL AUTHOR: WAGNER, E. G.; LANOIX, U. M.

DESCRIPTOR: *PUBLIC HEALTH; *RURAL AREAS; *RURAL DEVELOPMENT; *WASTE DISPOSAL; *WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 500P. MONOGRAPH 39

ABSTRACT: TO THOSE WHO ARE BEGINNING THEIR WORK IN EXCRETA DISPOSAL PROGRAMS IN RURAL AREAS, THIS WORK OFFERS SOME IDEAS FOR THE SOLUTION OF A VERY OLD PROBLEM. IT IS ALSO A PRACTICAL GUIDE.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001253

PUBLICATION DATE: 71

TITLE: WASTE STABILIZATION PONDS.

PERSONAL AUTHOR: GLOYNA, E. F.

DESCRIPTOR: *AERATED PONDS; AEROBIC DIGESTION; ANAEROBIC DIGESTION; *DESIGN; *DEVELOPING COUNTRIES; *FACILITIES; MAINTENANCE; *STABILIZATION LAGOONS; *WASTEWATER TREATMENT; WASTE DISPOSAL.

DESCRIPTIVE NOTE: MONOGRAPH 60

ABSTRACT: THIS MONOGRAPH SUMMARIZES THE AVAILABLE INFORMATION ON WASTE STABILIZATION PONDS; IT DEFINES ACCEPTABLE DESIGN CRITERIA, PROVIDES DATA ON POND DESIGN, SUGGESTS ALTERNATIVE APPROACHES TO DESIGN, AND DEALS WITH THE OPERATIONAL PROBLEMS THAT DETERMINE THE SUCCESS OR FAILURE OF ANY WASTEWATER TREATMENT FACILITY. IN ADDITION, IT PROVIDES BACKGROUND INFORMATION ON GENERAL WASTE TREATMENT PRACTICES, AQUATIC ORGANISMS, THE PRINCIPLES OF WASTE DISPOSAL, AND DISEASE PREVENTION.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001254

PUBLICATION DATE: 69

TITLE: PROBLEMS IN COMMUNITY WASTES MANAGEMENT.

PERSONAL AUTHOR: ELLIS, H. M.

DESCRIPTOR: AGRICULTURE; INDUSTRY; *MANAGEMENT; MUNICIPALITIES; *PUBLIC HEALTH; RECYCLING; *SEDIMENTATION; SOLID WASTES; TERTIARY TREATMENT; WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PHP 38

ABSTRACT: THE AUTHORS CONCERN THEMSELVES WITH THE INCREASING PROBLEMS INVOLVED IN THE EFFECTIVE MANAGEMENT OF LIQUID AND SOLID WASTES, RESULTING FROM THE RAPID GROWTH IN POPULATIONS, AND FROM URBANIZATION, INDUSTRIALIZATION AND TECHNOLOGICAL DEVELOPMENT. RESEARCH NEEDS AND HEALTH FACTORS RELATED TO THE REUSE OF WASTEWATER FOR AGRICULTURAL, INDUSTRIAL AND MUNICIPAL PURPOSES ARE DESCRIBED.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001256

PUBLICATION DATE: 73

TITLE: REUSE OF EFFLUENTS, METHODS OF WASTEWATER TREATMENT, AND HEALTH SAFEGUARDS: REPORT OF A WHO MEETING.

DESCRIPTOR: *BIBLIOGRAPHIES; *EFFLUENTS; *LAND APPLICATION; PUBLIC HEALTH; *RECYCLING; *WASTE DISPOSAL; *WASTEWATER TREATMENT; WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 125P.

ABSTRACT: CONSIDERS THE LATEST TECHNOLOGICAL DEVELOPMENTS IN WATER TREATMENT AND THE HEALTH HAZARDS ASSOCIATED WITH THE REUSE OF TREATED WASTEWATER FOR AGRICULTURAL, INDUSTRIAL, RECREATIONAL, AND DOMESTIC PURPOSES. TECHNIQUES FOR THE QUALITY CONTROL OF RENOVATED WATER ARE DESCRIBED, AND A BIBLIOGRAPHY AND A SURVEY OF WASTEWATER REUSE IN 30 COUNTRIES ARE INCLUDED.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001257

PUBLICATION DATE: 76

TITLE: ASPECTS OF WATER POLLUTION CONTROL.

DESCRIPTOR: MANAGEMENT; PLANNING; *POLLUTION; *WASTEWATER TREATMENT; *WASTE DISPOSAL; *WATER POLLUTION CONTROL; WORLD PROBLEMS.

ABSTRACT: DISCUSSION OF WATER POLLUTION CONTROL PROBLEMS AND MEANS FOR SOLVING THEM.

AVAILABILITY: WORLD HEALTH ORGANIZATION, DISTRIBUTION AND SALES SERVICE, 1211 GENEVA 27, SWITZERLAND.

IRIS ACCESSION NUMBER: EW001393

PUBLICATION DATE: 73

TITLE: CONSIDERATIONS FOR PREPARATION OF OPERATION AND MAINTENANCE MANUALS.

DESCRIPTOR: *CONSTRUCTION; DESIGN; *EQUIPMENT; *FACILITIES; *MAINTENANCE; MANUALS; *OPERATIONS (WASTEWATER); PIPES; PUMPS; RECORD KEEPING; SAFETY; SLUDGE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 239P.

ABSTRACT: ASSISTS COMPLIANCE WITH ELIGIBILITY REQUIREMENTS OF THE EPA CONSTRUCTION GRANT PROGRAM (40 CFR, PART 35, SECT 35.935-12 AND AMENDMENTS) FOR MUNICIPAL WASTEWATER TREATMENT PLANTS. PROVIDES A FLEXIBLE NATIONAL FORMAT. A SAMPLE MANUAL OUTLINE PREPARED FOR TREATMENT PLANTS, AND FOR PUMPING STATIONS/PIPELINES. DETAILED INFORMATIONAL REQUIREMENTS GIVEN FOR ALL ASPECTS OF OPERATION AND MAINTENANCE. EXAMPLES. BIBL.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402 PRICE: $3.10

IRIS ACCESSION NUMBER: EW001394

PUBLICATION DATE: 76

TITLE: ESTIMATING LABORATORY NEEDS FOR MUNICIPAL WASTEWATER TREATMENT FACILITIES.

DESCRIPTOR: *DESIGN; *FACILITIES; *LABORATORY EQUIPMENT; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *PLANNING; *PERSONNEL; *WASTEWATER TREATMENT

ABSTRACT: MANUAL PROVIDES DATA TO MAKE POSSIBLE THE ROUGH ESTIMATION OF LABORATORY NEEDS FOR MUNICIPAL WASTEWATER TREATMENT PLANTS. CRITERIA FOR PHYSICAL FACILITIES, STAFFING, AND LABORATORY SERVICES ARE INCLUDED. CONSIDERATIONS FOR SAMPLING AND TESTING NEEDS ARE PRESENTED FOR INDIVIDUAL PROCESSES, AND INCLUDE THE MINIMUM AND THE BEST TESTING REQUIREMENTS.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 PRICE: $1.45

IRIS ACCESSION NUMBER: EW001395

PUBLICATION DATE: 73

TITLE: START UP OF MUNICIPAL WASTEWATER TREATMENT FACILILITES.

DESCRIPTOR: BIOLOGICAL TREATMENT; CHEMICAL TREATMENT; *EQUIPMENT; *FACILITIES; *MAINTENANCE; *OPERATIONS (WASTEWATER); PHYSICAL TREATMENT; PRIMARY TREATMENT; SECONDARY TREATMENT; SLUDGE; *STARTUP; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 92P.

ABSTRACT: STARTUP PROCEDURES DESCRIBED AND AUGMENTED WITH CHECKLISTS FOR EACH TREATMENT PROCESS (EG. SCREENING, TRICKLING FILTERS, DIGESTION, DISPOSAL, ETC.). APPENDICES CONTAIN LIST OF EPA MANUALS ASSOCIATED WITH OPERATION AND MAINTENANCE TREATMENT PLANTS. GLOSSARY, BIBLIOGRAPHY.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING, WASHINGTON, DC 20402 PRICE: $1.40

IRIS ACCESSION NUMBER: EW001397

PUBLICATION DATE: 74

TITLE: ASPECTS OF STATE WIDE EMERGENCY RESPONSE PROGRAMS FOR MUNICIPAL WASTEWATER TREATMENT FACILITIES.

DESCRIPTOR: *CHEMICAL SPILLS; GOVERNMENT ROLE; *LAWS; *OIL SPILLS; *REGULATIONS; *STATE PROGRAMS; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 77P.

ABSTRACT: EMPHASIZES A COORDINATED STATE RESPONSE TO SPILLS REQUIRING AN ORGANIZED RESPONSE (STRIKE FORCES, SAMPLING TEAMS, ETC), RESPONSE CENTER FACILITIES, REPORTING SYSTEMS, AND COST RECOVERY. PERTINENT FEDERAL AND STATE STATUTES AND REGULATIONS ARE CITED AND EXTRACTED. AMPLE USE OF SPECIFIC EXAMPLES ARE EXTRACTED FROM STATE RESPONSE PROGRAMS. INCLUDES SAMPLE EMERGENCY RESPONSE PAMPHLET, VARIOUS FORMS, BIBL.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 PRICE: $1.25

IRIS ACCESSION NUMBER: EW002297

PUBLICATION DATE: 54

TITLE: AREA POISONING.

DESCRIPTOR: *AUDIOVISUAL AIDS; FILMS; *INSTRUCTIONAL FILMS; *INSTRUCTIONAL MATERIALS; *MAMMALS; *PESTICIDES; POST SECONDARY EDUCATION; *POISONS; *RODENTS; *RODENTICIDES

DESCRIPTIVE NOTE: (TITLE NO. 144500) (AGENCY NO. M-037.1-F2) 16MM, 9 MIN., OPTICAL SOUND, BLACK & WHITE, REVISED ED.

ABSTRACT: DISCUSSES THE USES OF SUCH RODENTICIDES AS RED SQUILL, ANTU, ARSENIC TRIOXIDF, 1080 WATER, AND WARFARIN.

AVAILABILITY: NATIONAL AUDIOVISUAL CENTER, REFERENCE SECTION, GENERAL SERVICES ADMINISTRATION, WASHINGTON, D.C. 20409

IRIS ACCESSION NUMBER: EW002759

PUBLICATION DATE: 68

TITLE: FIELD MANUAL FOR RESEARCH IN AGRICULTURAL HYDROLOGY.

PERSONAL AUTHOR: HOLTAN, H. M.; MINSHALL, N.E.

DESCRIPTOR: *AGRICULTURE; *FLOW MEASUREMENT; *FLOW METERS; *HYDROLOGY; *RESEARCH

DESCRIPTIVE NOTE: 214P.

ABSTRACT: DESIGNED FOR USE OF TECHNICIAN IN DESIGNING, INSTALLING AND OPERATING MEASURING DEVICES FOR WATER FLOW. CALCULATIONS AND DATA HANDLING ARE INCLUDED.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402 PRICE: $4.00

IRIS ACCESSION NUMBER: EW003559

PUBLICATION DATE: 77

TITLE: ENVIRONMENT AND MAN, VOL. 6 THE CHEMICAL ENVIRONMENT.

PERSONAL AUTHOR: LENIHAN, JOHN; FLETCHER, WILLIAM W.

DESCRIPTOR: AIR POLLUTION CONTROL; *ARSENIC; ARSENICALS; ASBESTOS; *CHEMISTRY; *ENVIRONMENT; ECOLOGY; *INSTRUCTIONAL MATERIALS; *LEAD; *POST SECONDARY EDUCATION; POISON; POLLUTION; *TOXINS; WATER POLLUTION CONTROL; *AFLATOXINS

DESCRIPTIVE NOTE: 163P.

ABSTRACT: IN THIS VOLUME 6 AUTHORS DISCUSS HAZARDS ARISING FROM THE CHEMICAL ENVIRONMENT AND REVIEW HISTORICAL DEVELOPMENTS, HARMFUL EFFECTS, CONTROL MEASURES, AND FUTURE PROSPECTS. THE FIRST CHAPTER IS ON NATURAL CYCLES OF THE ELEMENTS AND THEIR PERTURBATION BY MAN. IT COVERS SUCH TOPICS AS RESIDENCE TIMES IN THE ATMOSPHERE, WATER, AND SOIL; THE CARBON CYCLE; THE OXYGEN CYCLE; THE NITROGEN CYCLE; THE SULFER CYCLE; HEAVY METALS; AND THE PHOSPHORUS CYCLE. THE SECOND CHAPTER GIVES A HISTORY OF MERCURY AS A POLLUTANT, AND DISCUSSES THE TOXICOLOGICAL AND PHYSIOLOGICAL ASPECTS OF ORGANIC MERCURY COMPOUNDS IN FISH AND OTHER FOODS. CHAPTER THREE PRESENTS A HISTORY OF LEAD POISONING, AND COVERS SOURCES OF LEAD IN AIR, WATER, AND FOOD. CHAPTER FOUR COVERS ALL ASPECTS OF ARSENIC POISONING IN THE ENVIRONMENT, FOOD, AND POISONING DUE TO INDUSTRIAL USES. THE OCCURRENCE, METABOLISM, AND TOXICITY OF AFLATOXINS ARE THE TOPICS OF THE FIFTH CHAPTER. CHAPTER SIX CONSIDERS ASBESTOS.

AVAILABILITY: ACADEMIC PRESS, INC., 111 FIFTH AVE., NEW YORK, NY 10003 ($14.50)

IRIS ACCESSION NUMBER: EW003574

PUBLICATION DATE: JAN 77

TITLE: CLEAN WATER AND THE LAND: LOCAL GOVERNMENT'S ROLE.

DESCRIPTOR: CHANGE STRATEGIES; CITIZEN PARTICIPATION; *DECISION MAKING; *ENVIRONMENT; NONPOINT POLLUTION; NONPOINT SOURCES; *POLICY FORMATION; *PUBLIC POLICY; *REGIONAL PLANNING; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 23P.

ABSTRACT: THIS DRAFT REPORT IS INTENDED FOR DISTRIBUTION TO LOCAL GOVERNMENT OFFICIALS TO INFORM THEM ON THE ROLE LOCAL GOVERNMENT CAN PLAY IN PREVENTING AND CONTROLLING POLLUTION PROBLEMS, ESPECIALLY THOSE RELATED TO LAND USE AND NON-POINT SOURCES. THE REPORT SEEKS TO INCREASE INTEREST AND UNDERSTANDING OF THE FEDERAL WATER QUALITY MANAGEMENT PROGRAM. SOME MATERIAL IN THE REPORT MAY BE SUITABLE FOR USE IN PUBLIC PARTICIPATION PROGRAMS. SOME CASE HISTORIES ARE OFFERED DISCUSSING THE ROLE PLAYED BY LOCAL GOVERNMENT OFFICIALS IN WATER QUALITY MANAGEMENT PLANNING. THE REPORT OUTLINES THE ESSENTIALS OF 208 PLANNING, A DESCRIPTION OF NON-POINT SOURCE POLLUTION CONCEPTS, TACTICS, AND STRATEGIES FOR SOLVING NON-POINT SOURCE POLLUTION PROBLEMS, AND RECOMMENDATIONS FOR INTERGOVERNMENTAL PARTNERSHIP.

AVAILABILITY: U.S. EPA, WATER PLANNING DIVISION, 401 M ST., S.W., WASHINGTON, DC 20460

INSTITUTION NAME: AMERICAN SOCIETY OF PLANNING OFFICIALS.

IRIS ACCESSION NUMBER: EW004303

PUBLICATION DATE: MAY 78

TITLE: EROSION AND SEDIMENT CONTROL HANDBOOK.

PERSONAL AUTHOR: AMIMOTO, PERRY Y

DESCRIPTOR: CONSTRUCTION INDUSTRY; *CONSTRUCTION; DESIGN; ENGINEERING; *EROSION; *GUIDELINES; LEGISLATION; *LOCAL GOVERNMENT; *MANAGEMENT; MODELS; *NONPOINT SOURCES; *PLANNING; *POLLUTION CONTROL; *SEDIMENTATION; *SITE ASSESSMENT

DESCRIPTIVE NOTE: EPA REPORT NO. 440/3-78-003

ABSTRACT: THIS HANDBOOK PROVIDES THE PROCEDURES BY WHICH PHYSICAL AND CLIMATIC DATA AND EROSION PREVENTION PRACTICES CAN BE CONSIDERED IN MAKING AN ASSESSMENT FOR THE NEED FOR EROSION CONTROL AND AN EROSION CONTROL PLAN FOR A SITE. CONSTRUCTION ACTIVITIES WHICH REQUIRE EROSION CONTROL PLANS INCLUDE ROADS, LARGE GRADED AREAS, WASTE DISPOSAL SITES, MINE-LAND RECLAMATION, LOGGING, LANDSLIDE, MITIGATION, OFF-ROAD VEHICLE SITES, AND SKI SLOPES. THE REQUIRED CONTENT OF AN EROSION AND SEDIMENT CONTROL PLAN IS DESCRIBED, INCLUDING A MODEL EROSION CONTROL ORDINANCE.

AVAILABILITY: CALIFORNIA DEPARTMENT OF CONSERVATION, STATE OF CALIFORNIA.

IRIS ACCESSION NUMBER: EW004304

PUBLICATION DATE: JAN 68

TITLE: ROADS HANDBOOK.

DESCRIPTOR: CALIFORNIA; *CONSTRUCTION; *DESIGN; *ENGINEERING; *EROSION; *FORESTRY; *NONPOINT SOURCES; *ROADS; *STATEWIDE PLANNING; TRANSPORTATION; *WATER QUALITY

DESCRIPTIVE NOTE: 187P.

ABSTRACT: THIS HANDBOOK, APPROVED AND ISSUED BY THE STATE FORESTER OF CALIFORNIA AS AN OPERATIONAL HANDBOOK FOR ROAD DESIGN, DISCUSSES THE ENGINEERING PHASES OF PLANNING AND CONSTRUCTION OF ROADS AND THEIR PERTINENT FACILITIES. THE DOCUMENT WAS PREPARED PRIMARILY FOR CIVIL ENGINEERS, UNIT RANGERS, CAMP SUPERINTENDENTS, AND OTHER PERSONNEL CONCERNED WITH DESIGN OF ROADS AND TREATS ONLY THE DESIGN PHASES OF ROAD CONSTRUCTION. TOPICS DISCUSSED INCLUDE: DESIGN CRITERIA, PRECONSTRUCTION SURVEYS, OFFICE DESIGN PROCEDURE, DRAINAGE AND EROSION CONTROL, ROADSIDE TREATMENT, MISCELLANEOUS STRUCTURES, SURFACING, CONSTRUCTION SPECIFICATIONS, AND COST ESTIMATES.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW004305

PUBLICATION DATE: 78

TITLE: WATER POLLUTION PROBLEMS ON THE NATIONAL FORESTS IN MONTANA.

PERSONAL AUTHOR: WHEELER, RICHARD H.

DESCRIPTOR: 208 PLANS; CONTRACTS; *CONSTRUCTION; *FORESTRY; LAND USE; *LOGGING; *MANAGEMENT; *MONTANA; *NATIONAL FORESTS; *NONPOINT SOURCES; REGULATIONS; *ROADS; *SILVICULTURE; STATEWIDE PLANNING; *WATER POLLUTION CONTROL; WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 200P.

ABSTRACT: THIS REPORT, PREPARED BY THE FOREST SERVICE FOR THE WATER QUALITY BUREAU OF THE MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES, ASSESSES WATER POLLUTION PROBLEMS ON THE SIXTEEN MILLION ACRES OF NATIONAL FOREST LAND IN MONTANA. NEARLY 500 SIGNIFICANT POLLUTION PROBLEMS HAVE BEEN IDENTIFIED, AND THIS REPORT DISCUSSES A VARIETY OF THOSE POLLUTION SOURCES, NATURAL AS WELL AS MAN-CAUSED, AND DETAILS THE REHABILITATION NEEDS OF MONTANA'S NATIONAL FORESTS. THE REPORT CATEGORIZES PROBLEMS BY SEVERITY AND BY

FEASIBILITY OF CORRECTION OR MITIGATION. THE REPORT DEALS AT LENGTH WITH THE FOREST LAND MANAGEMENT PLANNING PROCESS, CONTRACT STIPULATIONS, FOREST COORDINATING REQUIREMENTS, AND THE PROPOSED NATIONAL FOREST MANAGEMENT ACT REGULATIONS. PROCESSES ARE IDENTIFIED FOR DEALING WITH SPECIAL PROBLEMS AND SPECIAL MITIGATING MEASURES AT THE FOREST OR THE DISTRICT LEVEL.

AVAILABILITY: MONTANA DEPT OF HEALTH & ENVIRONMENTAL SCIENCES, WATER QUALITY BUREAU, HELENA, MONTANA.

IRIS ACCESSION NUMBER: EW004306

TITLE: GUIDES FOR CONTROLLING SOIL EROSION AND WATER POLLUTION ON LOGGING JOBS IN VERMONT.

DESCRIPTOR: *EROSION; *FORESTRY; LAWS; *MANAGEMENT; *NONPOINT; *VERMONT; *NONPOINT SOURCES; *NONPOINT POLLUTION; *OPERATIONS (LOGGING); *ROAD CONSTRUCTION; *SEDIMENTATION; SOIL EROSION; *WATER POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES.

DESCRIPTIVE NOTE: 27P.

ABSTRACT: THIS DOCUMENT, DEVELOPED BY LOGGERS, LANDOWNERS, AND STATE AND FEDERAL AGENCIES, DESCRIBES A VARIETY OF PROCEDURES DESIGNED TO GUIDE LOGGERS AND LANDOWNERS IN PLANNING AND APPLYING EROSION AND SEDIMENT CONTROL PRACTICES BEFORE, DURING, AND AFTER LOGGING. TOPICS DISCUSSED INCLUDE: LOGGING ROADS, SKID TRAILS, STREAM CROSSINGS, FILTER STRIPS AND STREAMSIDE CUTTING PRACTICES, LOG LANDINGS, AND METHODS OF SEEDING AND MULCHING LOGGING ROADS, LOG LANDINGS AND SKID TRAILS. LAWS AND REGULATIONS AFFECTING LOGGING OPERATIONS IN VERMONT ARE DETAILED.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS OH 43212.

INSTITUTION NAME: VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION.

IRIS ACCESSION NUMBER: EW004307

PUBLICATION DATE: JUN 79

TITLE: LOGGING AND ITS EFFECTS IN NORTHERN HARDWOODS.

PERSONAL AUTHOR: NYLAND, R. D.; AND OTHERS.

DESCRIPTOR: AREA STUDIES; *CLEARCUTTING; *ECOLOGY; ENVIRONMENT; *ENVIRONMENTAL RESEARCH; EROSION; FORESTRY; HARDWOODS; *LOGGING; *MANAGEMENT; *NEW YORK; *SOCIAL FACTORS; *WATER QUALITY; WATER RESOURCES; WILDLIFE MANAGEMENT

DESCRIPTIVE NOTE: 134P. AFRI RESEARCH REPORT #31

ABSTRACT: DETAILED IS A RESEARCH STUDY INVESTIGATING THE EFFECTS OF TIMBER HARVESTING UPON VARIOUS ASPECTS OF THE FOREST ECOSYSTEM. COMMERCIAL LOGGING CREWS HARVESTED TIMBER FROM THREE LOCATIONS USING INDIVIDUAL TREE SELECTION, STRIP CLEARCUTTING AND PATCH CLEARCUTTING. SPECIAL PRACTICES WERE UTILIZED TO REDUCE LOGGING INJURIES TO RESIDUAL TREES AND REGENERATION, MINIMIZE SOIL DISTURBANCE AND COMPACTION, AND ALTER POST-LOGGING APPEARANCES. THE RESEARCH ASSESSED THE EFFECTS OF THE THREE TYPES OF LOGGING UPON RESIDUAL TREES, REGENERATION, SOILS, WILDLIFE, AND LOGGING CREW PRODUCTIVITY. VIEWER REACTIONS TO THE THREE LOGGING TREATMENTS WERE DETERMINED.

AVAILABILITY: APPLIED FORESTRY RESEARCH INSTITUTE.

IRIS ACCESSION NUMBER: EW004309

PUBLICATION DATE: JUN 77

TITLE: SILVICULTURAL CHEMICALS AND PROTECTION OF WATER AVAILABILITY

DESCRIPTOR: FERTILIZERS; *FORESTRY; *GUIDELINES; HERBICIDES; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; *PESTICIDES; *SILVICULTURE; TOXICOLOGY; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 232P. EPA 910/9-77-036

ABSTRACT: THIS REPORT IS A COMPREHENSIVE REVIEW OF MANAGEMENT PRACTICES INVOLVING SILVICULTURAL CHEMICALS AND EVALUATES THESE IN RELATION TO BOTH WATER QUALITY AND SILVICULTURAL OBJECTIVES. THE DOCUMENT PRESENTS AN ASSAY OF PROCEDURES AND BEST PRACTICES THAT PERMIT REACHING MANAGEMENT GOALS WITH NEGLIGIBLE IMPACT ON WATER QUALITY. THE REPORT DISCUSSES THE GENERAL SCOPE OF CHEMICAL USAGE IN THE PRACTICE OF SILVICULTURE, PRESENTS CRITERIA FOR LIMITING CONCENTRATIONS OF CHEMICALS IN WATER, COVERS CHEMICALS USED IN SILVICULTURE OPERATIONS, AND PRESENTS POLLUTION CONTROL GUIDELINES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161.

IRIS ACCESSION NUMBER: EW004310

PUBLICATION DATE: APR 76

TITLE: FOREST HARVEST, RESIDUE TREATMENT, REFORESTATION AND PROTECTION OF WATER QUALITY.

PERSONAL AUTHOR: MONTGOMERY, JAMES M.

DESCRIPTOR: *BIBLIOGRAPHIES; EPA REGION X; EROSION; *FORESTRY; *MANAGEMENT; *NONPOINT POLLUTION SOURCES; OPERATIONS (LOGGING); *PACIFIC NORTHWEST; PLANNING; REFERENCE MATERIALS; *REFORESTATION; *RESIDUE TREATMENT; WATER RESOURCES; *WATER POLLUTION CONTROL; *WATER QUALITY.

DESCRIPTIVE NOTE: 273P. EPA 910/9-76-020

ABSTRACT: THIS REPORT IS A STATE-OF-THE-ART REFERENCE ON THE PROTECTION OF WATER QUALITY IN PLANNING AND CONDUCTING

FOREST HARVEST, RESIDUE TREATMENT, AND REGENERATION OPERATIONS. POTENTIAL HAZARDS TO WATER QUALITY AND PROCEDURES, PRACTICES AND METHODS SUITABLE FOR PREVENTING, MINIMIZING AND CORRECTING WATER POLLUTION PROBLEMS ARE CONSIDERED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VA 22161.

IRIS ACCESSION NUMBER: EW004311

PUBLICATION DATE: NOV 78

TITLE: THE LAND USE HANDBOOK SECTION 6--EROSION CONTROL ON LOGGING JOBS.

PERSONAL AUTHOR: KENT, BRIAN

DESCRIPTOR: *EROSION; *FORESTRY; GUIDELINES; LAWS; *MAINE; *MANAGEMENT; *NONPOINT POLLUTION SOURCES; *OPERATIONS (LOGGING); *ROADS; *WATER POLLUTION CONTROL; *WOODLOTS.

DESCRIPTIVE NOTE: 28P.

ABSTRACT: THIS PUBLICATION, THE LAST OF A SERIES OF SIX DOCUMENTS KNOWN COLLECTIVELY AS THE LAND USE HANDBOOK, DESCRIBES HOW TO MINIMIZE EROSION ON LOGGING JOBS. WRITTEN FOR THE SMALL WOOD LOT OWNER, THE PLANNING AND CONSTRUCTION OF SKID AND TRUCK ROADS AND THE CONSTRUCTION OF DEVICES TO AVOID EROSION PROBLEMS ARE EXPLAINED. THE DOCUMENT CONCLUDES WITH A DESCRIPTION OF THE LAWS THAT WOOD LOT OWNERS, OPERATORS, AND CONTRACTORS IN MAINE SHOULD KNOW BEFORE THEY BEGIN A HARVEST OPERATION.

AVAILABILITY: DEPT OF CONSERVATION, STATE HOUSE, AUGUSTA, MAINE 04333.

IRIS ACCESSION NUMBER: EW004312

PUBLICATION DATE: OCT 77

TITLE: NON-POINT SOURCES OF POLLUTION AS RELATED TO FORESTRY ACTIVITIES IN ILLINOIS.

PERSONAL AUTHOR: AUBERTIN, G. M.; AND OTHERS.

DESCRIPTOR: AGRICULTURE; EROSION; *FORESTRY; *ILLINOIS; *MANAGEMENT; *NONPOINT POLLUTION SOURCES; OPERATIONS (LOGGING); *RECREATION; *SILVICULTURE; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 24P.

ABSTRACT: THIS REPORT DESCRIBES VARIOUS FORESTRY ACTIVITIES WHICH MAY HAVE AN ADVERSE IMPACT ON WATER QUALITY. BEST MANAGEMENT PRACTICES AND IMPLEMENTATION PROCEDURES FOR THE CONTROL OF NONPOINT SOURCES OF POLLUTION ASSOCIATED WITH SILVICULTURAL ACTIVITIES ARE DISCUSSED. A SUPPLEMENT TO THE REPORT CONSIDERS FOREST CONVERSION TO NON-FOREST USEAGE, THE USE OF OVERLAND RECREATIONAL VEHICLES (ORV'S), AND THE GRAZING OF LIVESTOCK IN FORESTED AREAS. A POSITION PAPER REGARDING THE IMPACT OF RECREATION ON WATER QUALITY IS APPENDED TO THE REPORT.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS OH 43212

IRIS ACCESSION NUMBER: EW004313

PUBLICATION DATE: 78

TITLE: PROCEEDINGS "208" SYMPOSIUM NON-POINT SOURCES OF POLLUTION FROM FORESTED LAND.

DESCRIPTOR: *CONFERENCE REPORTS; ECOLOGY; *FORESTRY; HYDROLOGY; MANAGEMENT; *NONPOINT POLLUTION SOURCES; *PLANNING; POLLUTION CONTROL; SOILS; *SYMPOSIA; *208 PLANS; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 400P.

ABSTRACT: THIS DOCUMENT IS A COLLECTION OF THE SPEECHES AND PAPERS PRESENTED AT A SYMPOSIUM ON NONPOINT POLLUTION SOURCES FROM FORESTED LAND HELD AT SOUTHERN ILLINOIS UNIVERSITY IN OCTOBER, 1977. TOPICS INCLUDE: FOREST ECOSYSTEMS, FOREST SOILS AND HYDROLOGY WATER QUALITY, MANAGEMENT PRACTICES, 208 PLANNING, AND LEGAL ASPECTS AND IMPLEMENTATION. A LIST OF THE PARTICIPANTS IN THIS SYMPOSIUM IS INCLUDED.

AVAILABILITY: STUDENT CENTER, SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE, ILL.

IRIS ACCESSION NUMBER: EW004314

PUBLICATION DATE: 77

TITLE: WOODLANDS OF THE NORTHEAST: EROSION AND SEDIMENT CONTROL GUIDES.

PERSONAL AUTHOR: HARTUNG, ROBERT E.; KRESS, JAMES M

DESCRIPTOR: CONSTRUCTION; DRAINAGE; *EROSION; FORESTRY; *GUIDELINES; *INSTRUCTIONAL MATERIALS; *NONPOINT SOURCE POLLUTION; OPERATIONS (LOGGING); ROADS; *SEDIMENT CONTROL; *SEEDING; *WATER POLLUTION CONTROL; *WOODLANDS.

DESCRIPTIVE NOTE: 25P.

ABSTRACT: THIS HANDBOOK IS DESIGNED TO GUIDE PRACTITIONERS IN PLANNING AND APPLYING EROSION AND SEDIMENT CONTROL MEASURES TO FOREST LANDS OF THE NORTHEASTERN UNITED STATES. THE DOCUMENT IS DIVIDED INTO FIVE SECTIONS. SECTION I PRESENTS GENERAL INFORMATION ON THE CAUSES OF WOODLAND EROSION AND DETAILS GUIDELINES TO IDENTIFY EROSION PRONE AREAS. SECTION II CONTAINS GUIDELINES FOR USE WHEN GRASS AND LEGUME SEEDING OF LOGGING ROADS IS ANTICIPATED. SECTION III IDENTIFIES TYPES OF WATER CONTROL METHODS COMMONLY USED ON LOGGING ROADS AND OUTLINES GENERAL SPECIFICATIONS FOR INSTALLATION. SECTION IV SHOWS A SIMPLE TYPE OF BRIDGE THAT

CAN BE USED AS AN EROSION AND POLLUTION CONTROL MEASURE. SECTION V DETAILS SOME GENERAL PRINCIPLES ON THE USE OF FILTER STRIPS.

AVAILABILITY: U.S. DEPT OF AGRIC., NORTHEAST TECHNICAL SERVICE CENTER, BROOMALL, PA.

IRIS ACCESSION NUMBER: EW004316

PUBLICATION DATE: MAY 78

TITLE: PROCEEDINGS APPLIED WATER RESOURCE MANAGEMENT WORKSHOP.

DESCRIPTOR: EROSION; FORESTRY; *HYDROLOGY; *INSTRUCTION; *MANAGEMENT; NATIONAL FORESTS; NONPOINT SOURCES; PLANNING; WATER QUALTIY; *WATER RESOURCES; WATERSHEDS; *WORKSHOPS

DESCRIPTIVE NOTE: 71P.

ABSTRACT: DETAILED ARE THE PROCEEDINGS OF THE APPLIED WATER RESOURCE MANAGEMENT WORKSHOP HELD IN ATLANTA, GEORGIA IN MAY, 1978. INCLUDED IN THE DOCUMENT ARE THE FOLLOWING: THE WORKSHOP AGENDA, SUMMARIES OF PAPERS PRESENTED, SUMMARIES OF PAPERS WHICH WERE SELECTED BUT WERE NOT PRESENTED, ABSTRACTS OF PAPERS WHICH WERE NOT SELECTED, LISTING OF THE PARTICIPANTS, AWARD WINNERS, AND AN EVALUATION OF THE WORKSHOP BY THE PARTICIPANTS.

AVAILABILITY: U.S.D.A. FOREST SERVICE, WASHINGTON, D.C. 20250

IRIS ACCESSION NUMBER: EW004322

PUBLICATION DATE: 77

TITLE: LAKES AND PHOSPHORUS INPUTS: A FOCUS ON MANAGEMENT.

PERSONAL AUTHOR: BOULDIN, D. R.; AND OTHERS.

DESCRIPTOR: ATTITUDES; ECOLOGY; *ENVIRONMENTAL RESEARCH; INTERDISCIPLINARY APPROACH; *LAKES; *MANAGEMENT; NEW YORK; *NONPOINT SOURCE POLLUTION; *PHOSPHOROUS; SURVEYS; *WATER POLLUTION CONTROL; *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 13P. INFORMATION BULLETIN 127

ABSTRACT: THIS BULLETIN IS A BRIEF SUMMARY OF THE PHOSPHOROUS PORTION OF THE RESULTS OF A RESEARCH PROJECT PUBLISHED IN THE BOOK, NITROGEN AND PHOSPHOROUS: FOOD PRODUCTION, WASTE, AND THE ENVIRONMENT (EW01927). THE FOUR YEAR, INTERDISCIPLINARY, RESEARCH STUDY INVESTIGATED THE EFFECTS OF NUTRIENTS ON THIRTEEN LAKES IN CENTRAL NEW YORK. THE DOCUMENT DISCUSSES THE ROLE OF PHOSPHOROUS IN LAKE ECOSYSTEMS, IDENTIFIES SOURCES OF PHOSPHOROUS, LISTS THE ALTERNATIVES AND COSTS OF CONTROL, DISCUSSES LAKE MANAGEMENT, AND INVESTIGATES THE HUMAN FACTOR IN NUTRIENT MANAGEMENT. RESULTS OF A SURVEY CONDUCTED TO DETERMINE THE LEVELS OF AWARENESS AND CONCERN RESIDENTS OF WATERSHEDS HELD ABOUT STREAMS AND LAKES AND THEIR PROPENSITY TO ACT OR SUPPORT ACTION TO SAFEGUARD THOSE RESOURCES ARE PRESENTED.

AVAILABILITY: NEW YORK STATE COLLEGE OF AGRICULTURE AND LIFE SCIENCES, CORNELL UNIVERSITY, ITHACA, NY 14853.

IRIS ACCESSION NUMBER: EW004325

PUBLICATION DATE: JUN 79

TITLE: FOREST WATER QUALITY: AN EXPERIMENT IN HARVESTING AND REGENERATING PIEDMONT FOREST.

PERSONAL AUTHOR: HEWLETT, JOHN D.

DESCRIPTOR: BEST MANAGEMENT PRACTICES; *CLEARCUTTING; *ENVIRONMENTAL RESEARCH; EROSION; *FORESTRY; GEORGIA; MEASUREMENT TECHNIQUES; PIEDMONT; *NONPOINT SOURCE POLLUTION; NUTRIENTS; OPERATIONS (LOGGING); SEDIMENTATION; *SILVICULTURE; WATER POLLUTION CONTROL; *WATER QUALITY; *WATERSHEDS

DESCRIPTIVE NOTE: 22P.

ABSTRACT: THIS PAPER REPORTS SUMMARY RESULTS FROM A COMPREHENSIVE EXPERIMENT ON CLEARCUTTING AND REGENERATING A SOUTHEASTERN PIEDMONT WATERSHED. TWO UNBRANCHED STREAMS DRAINING 80 AND 105 ACRES OF FOREST LAND IN PUTNAM COUNTY, GEORGIA, WERE SELECTED TO DETERMINE THE EFFECT OF FOREST HARVESTING AND REGENERATION ON THE QUALITY, QUANTITY AND TIMING OF WATER FLOWS FROM PIEDMONT LAND. THE EXTENT TO WHICH HYDROLOGICAL AND MINERAL CYCLES ARE ALTERED BY NORMAL FOREST PRACTICES WAS INVESTIGATED. THE STUDY CONCLUDES THAT FEARS ABOUT THE DRASTIC EFFECTS OF SILVICULTURE ON SEDIMENT AND MINERAL TRANSPORTS ARE LARGELY UNFOUNDED, WHILE THE EFFECTS ON WATER TEMPERATURE, ANNUAL WATER YIELD, AND STORM FLOWS ARE ABOUT WHAT WOULD BE EXPECTED FROM AN EXAMINATION OF PREVIOUS WORK.

AVAILABILITY: SCHOOL OF FOREST RESOURCES, UNIVERSITY OF GEORGIA, ATHENS, GEORGIA 30602

IRIS ACCESSION NUMBER: EW004326

PUBLICATION DATE: JUL 77

TITLE: WATER QUALITY AND FORESTRY: A REVIEW OF WATER QUALITY LEGISLATION AND THE IMPACT OF FORESTRY PRACTICES ON WATER QUALITY.

PERSONAL AUTHOR: POPE, P.E.

DESCRIPTOR: ENVIRONMENTAL RESEARCH; EROSION; *FEDERAL LEGISLATION; *FORESTRY; FERTILIZERS; GUIDELINES; *MANAGEMENT; *PUBLIC LAW 92-500, SECTION 208; *NONPOINT POLLUTION SOURCES; NUTRIENTS; *RESEARCH REVIEWS; STANDARDS; TEMPERATURE; WATER RESOURCES; *WATER QUALITY; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 20P.

ABSTRACT: THIS BULLETIN DISCUSSES FEDERAL WATER QUALITY LEGISLATION DEALING WITH POINT AND NON-POINT SOURCES OF POLLUTION AS THEY RELATE TO FOREST MANAGEMENT ACTIVITIES AND REVIEWS RESEARCH ON THE IMPACT OF FORESTRY PRACTICES ON WATER QUALITY THROUGH 1976. DISCUSSED IN THE SECTION ON WATER QUALITY LEGISLATION ARE PUBLIC LAW 92-500, SECTION 208, PROBLEMS IN APPLYING PRESENT WATER QUALITY STANDARDS FOR EVALUATING NON-POINT SOURCES OF POLLUTION, PROPOSED MODIFICATIONS FOR EXISTING WATER QUALITY GUIDELINES, AND PROBLEMS CONTAINED IN CURRENT APPROACHES TO WATER QUALITY MANAGEMENT. RESEARCH FROM THE FOLLOWING TOPICAL AREAS IS REVIEWED: SOIL EROSION AND SEDIMENTATION, WATER TEMPERATURE, NUTRIENT DISCHARGE, FOREST FERTILIZATION, AND VEGETATION CONTROL.

AVAILABILITY: PURDUE UNIVERSITY, DEPT. OF FORESTRY 8 NATURAL RESOURCES, WEST LAFAYETTE, INDIANA.

IRIS ACCESSION NUMBER: EW004328

PUBLICATION DATE: JUN 79

TITLE: CALIFORNIA GEOLOGY.

DESCRIPTOR: *CALIFORNIA; *EROSION; FORESTRY; *GEOLOGY; MANAGEMENT; *NONPOINT POLLUTION SOURCES; OPERATIONS (LOGGING); SEISMOLOGY; *STATEWIDE PLANNING; *TIMBER HARVESTING; TOPOGRAPHIC MAPS

DESCRIPTIVE NOTE: 21 VOL 32 NO 6P.

ABSTRACT: THIS MONTHLY PUBLICATION ON THE EARTH SCIENCES IN CALIFORNIA CONTAINS SIX ARTICLES RELATED TO GEOLOGY AND TIMBER HARVESTING PLANS. DISCUSSED ARE THE GEOLOGIST'S ROLE IN TIMBER HARVESTING PLAN REVIEW, SOIL EROSION IN CALIFORNIA'S COAST FOREST DISTRICT, SEISMIC WAVE ATTENUATION, TOPOGRAPHIC CONTOUR MAPS, EROSION INCREASE IN REDWOOD CREEK BASIN, AND WRIGHTWOOD MUDFLOWS.

AVAILABILITY: CALIFORNIA DIVISION OF MINES AND GEOLOGY, PO BOX 2980, SACRAMENTO,CA 95812 PRICE: .35^

INSTITUTION NAME: CALIFORNIA DIVISION OF MINES AND GEOLOGY.

IRIS ACCESSION NUMBER: EW004329

PUBLICATION DATE: FEB 78

TITLE: SEDIMENT AND WATER QUALITY: A REVIEW OF THE LITERATURE INCLUDING A SUGGESTED APPROACH FOR WATER QUALITY CRITERIA WITH SUMMARY OF WORKSHOP AND CONCLUSIONS AND RECOMMENDATIONS.

PERSONAL AUTHOR: IWAMOTA, ROBERT N.; AND OTHERS

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *CRITERIA; *ENVIRONMENTAL RESEARCH; EROSION; *LITERATURE REVIEWS; *NONPOINT POLLUTION SOURCES; RESEARCH NEEDS; *SEDIMENTS; WATER RESOURCES; *WATER QUALITY; *WORKSHOPS; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 151P. EPA 910/9-78-048

ABSTRACT: THIS REPORT PROVIDES A STATE-OF-THE-ART REVIEW OF PERTINENT LITERATURE ON THE SEDIMENTATION OF STREAMS AND RELATED WATER QUALITY CRITERIA. SUMMARIZED ARE THE PROCEEDINGS OF A SEDIMENTATION WORKSHOP HELD AT THE BATTELLE-SEATTLE RESEARCH CENTER IN 1977. THE BIBLIOGRAPHY CONTAINS 307 ANNOTATED AND 112 UNANNOTATED REFERENCES, SOME OF WHICH ARE CITED IN THE TEXT OF THE REPORT. THE DOCUMENT CONSISTS OF SIX MAJOR SECTIONS: CONCLUSIONS AND RECOMMENDATIONS DERIVED FROM THE BIBLIOGRAPHY AND THE WORKSHOP, A REVIEW OF THE LITERATURE ON SOURCES OF INORGANIC SEDIMENTS, SAMPLING TECHNIQUES, PREDICTIVE EQUATIONS, AND APPROACHES FOR DEVELOPMENT OF WATER QUALITY CRITERIA, RESEARCH NEEDS BASED ON THE ANALYSIS OF THE LITERATURE, RECOMMENDATIONS FOR APPROACHES FOR DEVELOPMENT OF WATER QUALITY CRITERIA, AND AN EXTENSIVE BIBLIOGRAPHY.

AVAILABILITY: U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION X, 1200 SIXTH AVENUE, SEATTLE, WASHINGTON 98101.

IRIS ACCESSION NUMBER: EW004330

PUBLICATION DATE: 77

TITLE: WATER RESOURCES AT THE FOREST-URBAN INTERFACE.

DESCRIPTOR: *BIBLIOGRAPHIES; *ECOLOGY; *ENVIRONMENTAL RESEARCH; *FORESTRY; HYDROLOGY; *RESEARCH NEEDS; *URBAN ENVIRONMENT; *WATER TREATMENT; *WASTEWATER TREATMENT; WATER QUALITY; *WATER RESOURCES; WATER SUPPLY

DESCRIPTIVE NOTE: 47P.

ABSTRACT: THIS DOCUMENT SETS FORTH A PROGRAM OF RESEARCH DESIGNED TO SEEK SOLUTIONS FOR THE PROBLEMS RELATED TO URBAN WATER SUPPLY AND URBAN WASTEWATER DISPOSAL IN THE METROPOLITAN NORTHEAST. THIS ANALYSIS DEFINES THE SCOPE OF FOREST-URBAN WATER SUPPLY AND WASTEWATER UTILIZATION PROBLEMS, IDENTIFIES THE AREAS OF NEEDED RESEARCH, AND ASSIGNS PRIORITIES WHERE POSSIBLE. RESEARCH PRIORITIES ARE INDICATED AS HIGH, MEDIUM OR LOW. FOR EACH PROBLEM AREA THE COMPONENTS OF THE PROBLEM AREA ARE DETAILED, RELEVANT LITERATURE IS REVIEWED, AND THE RESEARCH NEEDS ARE PRESENTED. A BIBLIOGRAPHY OF THE LITERATURE CITED CONCLUDES EACH SECTION.

AVAILABILITY: PINCHOT INSTITUTE, PROGRAM COORDINATOR, U.S.D.A., 6816 MARKET ST., UPPER DARBY, PA 19082.

INSTITUTION NAME: PINCHOT INSTITUTE.

IRIS ACCESSION NUMBER: EW004331

PUBLICATION DATE: MAR 78

TITLE: KENTUCKY FOREST PRACTICE GUIDELINES FOR WATER QUALITY MANAGEMENT.

DESCRIPTOR: BEST MANAGEMENT PRACTICES; EROSION CONTROL;

*FORESTRY; *GUIDELINES; *KENTUCKY; *MANAGEMENT; *NONPOINT POLLUTION SOURCES; ROADS; *SILVICULTURE; WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 42P.

ABSTRACT: THIS GUIDE IS A TECHNICAL REFERENCE FOR USE IN THE IDENTIFICATION, PLANNING, AND TREATMENT OF EXISTING OR POTENTIAL NONPOINT SOURCES OF POLLUTION RESULTING FROM SILVICULTURAL ACTIVITIES. DESCRIBED ARE THE CONDITIONS AND PROBLEMS WHICH CONTRIBUTE TO WATER POLLUTION IN KENTUCKY. MANAGEMENT PRACTICES WHICH WILL ELIMINATE OR MINIMIZE THE WATER POLLUTION PROBLEMS RESULTING FROM CERTAIN FOREST ACTIVITIES ARE PRESENTED. INCLUDED IN THE FOREST ACTIVITIES DISCUSSED ARE ACCESS ROAD DESIGN, FIRE LANE CONSTRUCTION, BURNING, TREE PLANTING, WOODLAND IMPROVEMENT AND VEGETATIVE COVER ESTABLISHMENT.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS, OH 43212.

INSTITUTION NAME: SILVICULTURE NON-POINT SOURCE TASK FORCE.

IRIS ACCESSION NUMBER: EW004332

PUBLICATION DATE: 71-78

TITLE: STATE FOREST NOTES.

PERSONAL AUTHOR: STONEMAN, NORMAN N.; AND OTHERS.

DESCRIPTOR: *CALIFORNIA; EQUIPMENT; *EROSION CONTROL; FORESTRY; *GUIDELINES; MANAGEMENT; MEASUREMENT TECHNIQUES; JACKSON STATE FOREST; *NONPOINT POLLUTION SOURCES; *OPERATIONS (LOGGING); *REVEGETATION; *ROADS; SILVICULTURE; WATER POLLUTION CONTROL; WATER QUALITY

ABSTRACT: PRESENTED IS A COMPILATION OF SEVEN BULLETIN'S ON SOIL EROSION CONTROL DURING AND AFTER LOGGING. THREE OF THE DOCUMENTS REFER SPECIFICALLY TO JACKSON STATE FOREST IN CALIFORNIA AND DISCUSS THE SELECTIION OF GRASS AND FERTILIZER FOR ROAD SPOIL EROSION CONTROL, THE USE OF ANNUAL RYEGRASS AND UREA FOR POST LOGGING EROSION CONTROL, AND THE USE OF A MIN-YARDER TO CLEAR STREAMS. THE REMAINING FOUR BULLETINS DISCUSS THE 3-F EROSION BRIDGE, SOIL EROSION DEFINITIONS, ROLLING DIPS, AND WATER BREAKS.

AVAILABILITY: CALIFORNIA DIVISION OF FORESTRY, 1416 NINTH STREET, SACRAMENTO, CALIFORNIA 95814 (FREE)

IRIS ACCESSION NUMBER: EW004333

PUBLICATION DATE: DEC 79

TITLE: CONTROLLING EROSION ON CONSTRUCTION SITES.

DESCRIPTOR: *CONSTRUCTION; DESIGN; *EROSION; GOVERNMENT ROLE; *GUIDELINES; LAND USE; *LOCAL GOVERNMENT; *NONPOINT POLLUTION SOURCES; *PLANNING; *POLICY FORMATION; *RUNOFF; SEDIMENTATION; WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 32P.

ABSTRACT: DESCRIBED ARE EROSION AND SEDIMENT CONTROL PRINCIPLES AND MEASURES THAT CAN BE IMPLEMENTED TO CONTROL EROSION ON CONSTRUCTION SITES. MECHANICAL CONTROL MEASURES DESCRIBED INCLUDE LAND GRADING, BENCH TERRACES, SUBSURFACE DRAINS, DIVERSIONS, BERMS, STORMSEWERS, LINED CHANNELS AND SEDIMENT BASINS. VEGETATIVE CONTROL MEASURES DETAILED INCLUDE MULCHES, TEMPORARY AND PERMANENT COVER CROPS, AND FIBROUS MATERIALS. TECHNIQUES FOR IMPROVING CO-OPERATION AMONG GOVERNMENT, THE PUBLIC, AND BUILDERS AND DEVELOPERS ARE PRESENTED. SOURCES OF ASSISTANCE TO BUILDERS, DEVELOPERS, TOWN AND COUNTY OFFICIALS, AND OTHERS WORKING OUT LAND AND WATER RESOURCE PROBLEMS ARE DETAILED.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW004335

PUBLICATION DATE: 72

TITLE: SOIL EROSION AND SEDIMENTATION CONTROL MANUAL.

PERSONAL AUTHOR: SCHADEL, AFTON V.; AND OTHERS.

DESCRIPTOR: *EROSION; FACILITIES; *GUIDELINES; LAWS; LEGISLATION; *NONPOINT SOURCE POLLUTION; *PENNSYLVANIA; *PERMITS; PLANNING; REGULATIONS; *SEDIMENTATION; *STATEWIDE PLANNING; *WATER POLLUTION CONTROL; WATER QUALITY

DESCRIPTIVE NOTE: 34P.

ABSTRACT: PRESENTED ARE THE GUIDELINES FOR THE DEVELOPMENT OF EROSION AND SEDIMENTATION CONTROL PLANS IN PENNSYLVANIA AND THE PROCEDURES FOR PREPARATION OF AN APPLICATION FOR AN EROSION CONTROL PERMIT. THE DOCUMENT REVIEWS APPLICABLE LAW AND REGULATIONS, DETAILS THE PROCEDURE FOR OBTAINING AN EROSION CONTROL PERMIT, OUTLINES SPECIFIC AND GENERAL FACTORS TO BE CONSIDERED IN DEVELOPING A PLAN AND DISCUSSES EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES, INCLUDING RESTORATION. INCLUDED IN THE APPENDIX ARE THE ADDRESSES OF THE COUNTY CONSERVATION DISTRICTS, A BIBLIOGRAPHY, EROSION AND SEDIMENTATION CONTROL RULES AND REGULATIONS, AND A SOIL SURVEY AVAILABILITY MAP.

AVAILABILITY: EPA DISSEMINATION PROJECT, 1200 CHAMBERS RD., COLUMBUS OH 43212

IRIS ACCESSION NUMBER: EW004345

PUBLICATION DATE: OCT 78

TITLE: ROADLESS AREA--INTENSIVE MANAGEMENT TRADEOFFS ON WESTERN NATIONAL FORESTS.

PERSONAL AUTHOR: FIGHT, ROGER D.; AND OTHERS.

DESCRIPTOR: COST EFFECTIVENESS; *ECONOMIC RESEARCH; ECONOMICS; *FORESTRY; *MANAGEMENT; NATIONAL FORESTS; NATURAL

RESOURCES; *ROADS; *TIMBER; *TRADEOFFS; *WATER QUALITY

DESCRIPTIVE NOTE: 57P.

ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY IN SEVEN WESTERN NATIONAL FORESTS. INVESTIGATED WAS WHETHER AS MUCH TIMBER COULD BE HARVESTED WITHOUT HARVESTING FROM ROADLESS AREAS IF THE RESOURCES SAVED BY NOT DEVELOPING THE ROADLESS AREAS WERE USED FOR MORE INTENSIVE TIMBER MANAGEMENT ON THE REMAINING LAND. DISCUSSED AND IDENTIFIED ARE THE CRITICAL FACTORS AND MAJOR ADVERSE IMPACTS ASSOCIATED WITH CHANGING FROM THE BASE PROGRAMMED HARVEST TO THE REALLOCATION ALTERNATIVE. THESE INCLUDE WATER QUALITY, WATER QUANTITY AND TIMING OF FLOW, SOIL STABILITY AND PRODUCTIVITY, FORAGE PRODUCTION, ANADROMOUS AND RESIDENTIAL COLD WATER FISH POPULATIONS, WILDLIFE POPULATIONS, OPPORTUNITIES FOR DEVELOPED RECREATION, VISUAL RESOURCES, AIR QUALITY, AND MINERAL AND ENERGY DEVELOPMENT OPPORTUNITIES.

AVAILABILITY: USDA FOREST SERVICE, WASHINGTON, D.C.

IRIS ACCESSION NUMBER: EW004346

PUBLICATION DATE: 72

TITLE: TECHNICAL DRAWING WITH APPLIED GEOMETRY, ALGEBRA AND TRIGONOMETRY.

PERSONAL AUTHOR: WHIPPLE, DON; COSTELLO, JOHN.

DESCRIPTOR: *ENGINEERING DRAWING; GEOMETRIC CONCEPTS; GRAPHIC ARTS; ILLUSTRATIONS; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *MATHEMATICS; TECHNICIANS; *TECHNICAL EDUCATION.

DESCRIPTIVE NOTE: 288P.

ABSTRACT: THIS MANUAL PROVIDES BASIC INFORMATION ON TECHNICAL DRAWING FOR STUDENTS CONSIDERING A CAREER AS A DRAFTSMAN. TOPICS DISCUSSED INCLUE: OBLIQUE, ISOMETRIC, AND MULTIVIEW SKETCHING; GEOMETRIC CONSTRUCTION; AND SECTIONAL AND AUXILIARY VIEWS.

IRIS ACCESSION NUMBER: EW004348

PUBLICATION DATE: 75

TITLE: FOREST RESIDUES IN HEMLOCK-SPRUCE FORESTS OF THE PACIFIC NORTHWEST AND ALASKA--A STATE-OF-KNOWLEDGE REVIEW WITH RECOMMENDATIONS FOR RESIDUE MANAGEMENT.

PERSONAL AUTHOR: RUTH, ROBERT H.; HARRIS, A. S.

DESCRIPTOR: BURNING; DECISION MAKING; *ECOLOGY; FOREST RESIDUES; *FORESTRY; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); *PACIFIC NORTHWEST; SITKA SPRUCE; SLASH DISPOSAL; *WASTE DISPOSAL; WASTES; WATER POLLUTION CONTROL; WESTERN HEMLOCK

DESCRIPTIVE NOTE: 52P. USDA FOREST SERVICE GENERAL TECHNICAL REPORT PNW-39

ABSTRACT: EXAMINED IS RESIDUE MANAGEMENT THROUGHOUT THE NORTH PACIFIC CENTRAL FOG BELT, INCLUDING OREGON, WASHINGTON, BRITISH COLUMBIA AND ALASKA. THE APPROACH UTILIZED IS A GENERAL EXAMINATION OF FOREST RESIDUES AS PART OF THE ECOSYSTEM, THEN A DETAILED INVESTIGATION OF DEAD AND DECAYING MATERIAL AFTER LOGGING, CONSIDERING FIRE HAZARD AND THE SILVICULTURAL, PHYSICAL, CHEMICAL, AND AESTHETIC EFFECTS OF THIS MATERIAL. RESIDUE TREATMENTS ARE DESCRIBED, EVALUATED AND RECOMMENDED. THE DOCUMENT IS INTENDED TO PROVIDE AN IMPROVED SCIENTIFIC FRAMEWORK FOR MANAGEMENT DECISIONS.

AVAILABILITY: PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, PO BOX 3141, PORTLAND, OREGON 97208.

IRIS ACCESSION NUMBER: EW004349

PUBLICATION DATE: 78

TITLE: LIVESTOCK GRAZING AND THE AQUATIC ENVIRONMENT.

PERSONAL AUTHOR: MEEHAN, WILLIAM R.; PLATTS, WILLIAM S.

DESCRIPTOR: *AGRICULTURE; ECOLOGY; *ENVIRONMENTAL RESEARCH; FISHERIES; *GRAZING; *LIVESTOCK; *MANAGEMENT; *NONPOINT POLLUTION SOURCES; RANGELAND; SEDIMENTS; *WASTES; WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 5P.

ABSTRACT: REVIEWED IS RESEARCH ON LIVESTOCK GRAZING OF RANGELAND AND ITS EFFECT ON THE AQUATIC ENVIRONMENT IN THE WEST. THE DOCUMENT TRACES THE HISTORY OF LIVESTOCK GRAZING RESEARCH AND LIVESTOCK PRODUCTION ON PUBLIC AND PRIVATE LAND, SUMMARIZES THE LITERATURE ON THE INTERRELATIONSHIPS EXISTING BETWEEN LIVESTOCK GRAZING AND SEDIMENTATION, ANIMAL WASTES IN STREAMS, AND THE COLD WATER FISH HABITAT, DISCUSSES THE FIVE GRAZING SYSTEMS COMMONLY USED TO DISTRIBUTE LIVESTOCK ON THE RANGE, AND MAKES RECOMMENDATIONS FOR NEEDED RESEARCH.

AVAILABILITY: JOURNAL OF SOIL AND WATER CONSERVATION, NOVEMBER-DECEMBER 1978, VOLUME 33, NUMBER 6.

IRIS ACCESSION NUMBER: EW004350

PUBLICATION DATE: 77

TITLE: SEEPAGE, DRAINAGE, AND FLOW NETS-SECOND EDITION.

PERSONAL AUTHOR: CEDERGREN, HARRY R.

DESCRIPTOR: *CONSTRUCTION; DRAINAGE; *ENGINEERING; EQUIPMENT; *GROUNDWATER; *HYDRAULICS; LAND USE; RUNOFF; *SOIL SCIENCE; SEEPAGE; WATER SUPPLY; *WATER RESOURCES; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 534P.

ABSTRACT: PRESENTED ARE METHODS FOR ANALYZING AND DESIGNING

SYSTEMS TO CONTROL SEEPAGE AND GROUNDWATER IN MAJOR CIVIL ENGINEERING WORKS INCLUDING: FOUNDATIONS, HYDRAULIC STRUCTURES, EARTHEN DAMS, ROADS, AIRFIELDS, AND WASTE DISPOSAL STRUCTURES. PART I COVERS PERMEABILITY, SEEPAGE FUNDAMENTALS, AND FLOW NET CONSTRUCTION. PART II GIVES PRACTICAL APPLICATIONS FOR THE DESIGN OF FILTERS AND DRAINS AND OTHER MEASURES FOR THE CONTROL OF SEEPAGE. THIS EDITION ALSO SUMMARIZES AGRICULTURAL DRAINAGE; SHOWS HOW TO PREVENT HYDROPLANING ON PAVEMENTS; AND EXPLAINS INCREASING SEISMIC STABILITY IN DAMS.

AVAILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE, SOMERSET, NJ 08873 PRICE: $35.00

IRIS ACCESSION NUMBER: EW004351

PUBLICATION DATE: 79

TITLE: INDUSTRIAL FIRE HAZARDS HANDBOOK: FIRST EDITION.

DESCRIPTOR: ACCIDENT PREVENTION; *FIRE PREVENTION; GUIDELINES; *INDUSTRY; *MANAGEMENT; PLANNING; *SAFETY; STANDARDS; *WORK ENVIRONMENT

DESCRIPTIVE NOTE: 933P.

ABSTRACT: THIS BOOK IDENTIFIES MAJOR INDUSTRIES AND INDUSTRIAL PROCESSES, OUTLINES THE FIRE HAZARDS ASSOCIATED WITH THEM, AND EXPLAINS THE METHODS USED TO ELIMINATE OR CONTROL THE HAZARDS. INDUSTRIES AND PROCESSES DISCUSSED INCLUDE: NUCLEAR ENERGY PLANTS; GRAIN MILLS; PLASTIC PRODUCTS; COMPUTER CENTERS; SHIPYARDS; DIPPING AND COATING PROCESSES; GRINDING AND MILLING OPERATIONS; METAL WORKING; AIR MOVING EQUIPMENT; MATERIALS HANDLING SYSTEMS; AND INDUSTRIAL WASTE CONTROL.

AVAILABILITY: NATIONAL FIRE PROTECTION AGENCY, 470 ATLANTIC AVE, BOSTON, MA 02210 PRICE: $40.00

IRIS ACCESSION NUMBER: EW004352

PUBLICATION DATE: JUN 74

TITLE: DESALTING TECHNIQUES FOR WATER SUPPLY QUALITY IMPROVEMENT.

DESCRIPTOR: *COST EFFECTIVENESS; *DESALINATION; EQUIPMENT; *MUNICIPALITIES; *OPERATIONS (WATER); PUBLIC HEALTH; *TECHNOLOGY; UTILITIES; *WATER QUALITY; *WATER SUPPLY; *WATER TREATMENT; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 237P.

ABSTRACT: INFORMATION IS PRESENTED WHICH DECRIBES METHODS OF IMPROVING THE QUALITY OF BRACKISH WATER SUPPLIES AND WHICH WILL PERMIT PRELIMINARY ESTIMATES TO BE MADE OF THE TANGIBLE BENEFITS OF WATER QUALITY IMPROVEMENT. ADDITIONALLY, THE CAPITAL AND OPERATING COSTS OF CONVENTIONAL AND DESALTING TREATMENT PLANTS ARE DISCUSSED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $10.75

INSTITUTION NAME: AMERICAN WATER WORKS ASSOCIATION.

IRIS ACCESSION NUMBER: EW004353

PUBLICATION DATE: 77

TITLE: FLAMELESS ATOMIC ABSORPTION DETERMINATION OF MERCURY. (COLEMAN MAS-50) XT-92.

PERSONAL AUTHOR: PFAFF, J.D.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; AUDIOVISUAL AIDS; *CHEMICAL ANALYSIS; *EQUIPMENT UTILIZATION; *INSTRUCTIONAL MATERIALS; INSTRUMENTATION; JOB SKILLS; *LABORATORY TECHNIQUES; *MERCURY; SPECTROSCOPY; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: INCLUDED IS A 14 MINUTE TAPE, 37 SLIDES AND A SCRIPT.

ABSTRACT: THIS IS A SLIDE-TAPE PRESENTATION ILLUSTRATING THE DETERMINATION OF MERCURY IN WASTEWATER TREATMENT OPERATION. THE PROCEDURE IS BROKEN DOWN INTO THREE STEPS: CHEMISTRY; AERATION; AND FLAMELESS ATOMIC ABSORPTION.

AVAILABILITY: NTOTC, 26 W ST. CLAIR, CINCINNATI OH 45268 (AVAILABLE ON LOAN)

IRIS ACCESSION NUMBER: EW004355

PUBLICATION DATE: 78

TITLE: DEMINERALIZATION BY ION EXCHANGE.

DESCRIPTOR: CERTIFICATION; CHEMICAL REACTIONS; DRINKING WATER; *EQUIPMENT; *INSTRUCTIONAL MATERIALS; ION EXCHANGE; MINERALS; OPERATIONS (WATER); *POST SECONDARY EDUCATION; *TECHNOLOGY; WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 28P.

ABSTRACT: THIS MANUAL DISCUSSES THE AREAS OF THE SUBJECT OF DEMINERALIZATION OF WATER BY ION-EXCHANGE THAT ARE OF GENERAL AND SPECIFIC INTEREST TO THE WATER CONDITIONING INDUSTRY. THE TEXT EXPLAINS THE TECHNOLOGY OF THE PROCESS, IDENTIFIES AREAS OF POTENTIAL APPLICATION, AND ALERTS THE DEALER TO THE NEED FOR ASSISTANCE FROM EQUIPMENT MANUFACTURERS OR AUTHORIZED CONSULTING PERSONNEL.

AVAILABILITY: WATER QUALITY ASSOCIATION, 477 BUTTERFIELD RD., LOMBARD, IL 60148 PRICE: $2.00-PAPER COPY.

INSTITUTION NAME: WATER QUALITY ASSOCIATION.

IRIS ACCESSION NUMBER: EW004356
PUBLICATION DATE: 76

TITLE: SEWAGE TREATMENT IN HOT CLIMATES.

PERSONAL AUTHOR: MARA, DUNCAN

DESCRIPTOR: *CLIMATIC FACTORS; *DESIGN; *DEVELOPING COUNTRIES; *ENGINEERING; MICROBIOLOGY; *OPERATIONS (WASTEWATER); POST SECONDARY EDUCATION; RECYCLING; SEWAGE; *WASTEWATER TREATMENT; *WASTE DISPOSAL; WASTES; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 166P.

ABSTRACT: PRESENTED ARE MODERN DESIGN PROCEDURES FOR PROCESSES WHICH ARE SUITABLE FOR THE TREATMENT OF SEWAGE IN HOT CLIMATES. THE ECONOMIC RE-USE OF DOMESTIC WASTES IN EMPHASIZED. DISCUSSED ARE THE ESSENTIAL PRINCIPLES AND MICROBIOLOGY ASSOCIATED WITH SEWAGE TREATMENT; PRELIMINARY, CONVENTIONAL, AND TERTIARY TREATMENT; AND TREATMENT PROCESSES SUCH AS AERATED LAGOONS, OXIDATION DITCHES, HIGH-RATE BIOFILTRATION, SEPTIC TANKS, AND EFFLUENT RE-USE.

AVAILABILITY: JOHN WILEY & SONS, INC., ONE WILEY DRIVE, SOMERSET, NJ 08873 PRICE: $23.00

IRIS ACCESSION NUMBER: EW004357

PUBLICATION DATE: 78
TITLE: THE RIVER BASIN; AN INTRODUCTION TO THE STUDY OF HYDROLOGY.

PERSONAL AUTHOR: SMITH, DAVID INGLE AND STOPP, PETER.

DESCRIPTOR: EARTH SCIENCE; ENVIRONMENT; GEOGRAPHY; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; *POST SECONDARY EDUCATION; *RIVERS; *SCIENCE EDUCATION; UNDER GRADUATE STUDY; *WATER RESOURCES; *WATERSHEDS

DESCRIPTIVE NOTE: 120P.

ABSTRACT: DESIGNED FOR INTRODUCTORY COLLEGE COURSES IN GEOGRAPHY OR ENVIRONMENTAL STUDIES, THE DOCUMENT DESCRIBES THE WATER CYCLE WITHIN A RIVER BASIN. TAKING AS ITS CENTRAL THEME THE FACTORS WHICH AFFECT THE FLOW OF WATER IN A RIVER CHANNEL, IT LOOKS AT PRECIPITATION, EVAPORATION, TRANSPIRATION, SOIL MOISTURE, THE SHAPE OF THE RIVER BASIN, CHANNEL FLOW, AND FLOODS. ALSO EXAMINED ARE THE MOVEMENT OF RIVER LOAD AND THE DIFFERENT CHANNEL PATTERNS PRODUCED. TECHNIQUES ARE PRESENTED WHICH WILL PRODUCE RESULTS OF REASONABLE SCIENTIFIC ACCURACY WITHIN A VERY REASONABLE BUDGET. EXAMPLES FROM ACTUAL FIELDWORK ARE USED.

AVAILABILITY: CAMBRIDGE UNIVERSITY PRESS, 510 NORTH AVE, NEW ROCHELL, NY 10801 PRICE: $13.95 HARD COVER/$5.95 PAPER.

IRIS ACCESSION NUMBER: EW004358
PUBLICATION DATE: 79

TITLE: EFFLUENT PRESSURE SEWER SYSTEMS. ON-SITE WASTE MANAGEMENT VOLUME VII.

PERSONAL AUTHOR: LANGFORD, ROBERT E.

DESCRIPTOR: *DESIGN; ECONOMICS; *FACILITIES; *MANAGEMENT; *ONSITE SYSTEMS (WASTEWATER); *PRESSURE SYSTEMS; *SEWERS; *TECHNOLOGY; *WASTEWATER TREATMENT; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 89P.

ABSTRACT: DISCUSSED ARE THE USE AND TECHNICAL ASPECTS OF EFFLUENT PRESSURE SEWAGE SYSTEMS. FOLLOWING A DECRIPTION OF THE CONCEPT AND HISTORY OF EFFLUENT PRESSURE SEWAGE SYSTEMS, THE ADVANTAGES OF EFFLUENT PRESSURE SYSTEMS OVER MORE TRADITIONAL METHODS ARE DETAILED. COST COMPARISIONS AND SYSTEM DESIGN CONSIDERATIONS ARE PROVIDED. SOURCES OF FUNDING ARE SUGGESTED. EXISTING EFFLUENT PRESSURE SEWER SYSTEMS IN DESIGN CONSTRUCTION OR OPERATION IN THE UNITED STATES ARE LISTED AND DESCRIBED.

AVAILABILITY: HANOVER INC., PO BOX 1047, FINDLEY, OH 45840
PRICE: $3.00

IRIS ACCESSION NUMBER: EW004359

PUBLICATION DATE: OCT 77
TITLE: KENTUCKY PUBLIC AND SEMIPUBLIC WATER SUPPLIES REGULATIONS (401 KAR 6-015).

DESCRIPTOR: ANALYTICAL TECHNIQUES; CHEMICAL ANALYSIS; CONSTRUCTION; *DRINKING WATER; FACILITIES; *LAWS; *MEASUREMENT TECHNIQUES; *KENTUCKY; *PUBLIC HEALTH; *RECORDS; *RECORD KEEPING; *REGULATIONS; *STATE STANDARDS; SAMPLING; *UTILITIES; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 42P.

ABSTRACT: PRESENTED ARE THE STATE REGULATIONS FOR PUBLIC AND SEMIPUBLIC WATER SUPPLIES IN KENTUCKY. DISCUSSED ARE THE GENERAL PROVISIONS; DESIGN, CONSTRUCTION AND APPROVAL OF NEW FACILITIES; VARIANCES AND EXEMPTIONS; PUBLIC NOTIFICATION; REPORTS AND RECORDS; RECORD MAINTENANCE; AND PENALTIES. SAMPLING, ANALYTICAL TECHNIQUES, AND MAXIMUM CONTAINMENT LEVELS ARE PRESENTED FOR BACTERIA, TURBIDITY, ORGANIC AND INORGANIC CHEMICALS AND RADIONUCLIDES.

AVAILABILITY: KENTUCKY DEPT FOR NATURAL RESOURCES & EE, CENTURY PLAZA, HWY 127 SOUTH, FRANKFORT, KY 40601 (FREE).

INSTITUTION NAME: KENTUCKY DEPT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION.

IRIS ACCESSION NUMBER: EW004361
PUBLICATION DATE: 79

TITLE: SYMPOSIUM ON REAERATION RESEARCH.

DESCRIPTOR: *AERATION; *CASE HISTORIES; *ENVIRONMENTAL INFLUENCES; ENGINEERING; FISH; *LAKES; *OXYGEN; *RESEARCH; *RESERVOIRS; *RIVERS; SCIENCES; *TECHNOLOGY; *WATER QUALITY; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 367P.

ABSTRACT: THIS DOCUMENT CONTAINS THE PAPERS PRESENTED AT THE SYMPOSIUM ON REAERATION RESEARCH HELD IN 1975. THE PAPERS DRAW FROM THE DISCIPLINES OF BIOLOGICAL SCIENCES AND ENGINEERING AND FOCUS ON THE PROBLEMS ASSOCIATED WITH SUPPLEMENTAL AERATION OF LAKES AND RIVERS, SEASONAL DISSOLVED OXYGEN DEFICIENCIES, AND CASE HISTORIES WHERE SOME FORM OF AERATION WAS USED. TOPICS DISCUSSED INCLUDE: DISSOLVED OXYGEN IN U.S. STREAMS; EFFECTS OF SUPERSATURATION ON FISH; LAKE HYPOLIMNION OXYGENATION SYSTEM; SELECTION OF OXYGEN DIFFUSERS; AND CASE STUDIES AT CASITA RESERVOIR, LAKE ARBUCKLE, ALLATOONA RESERVOIR, AND CHICAGO NORTH SHORE CHANNEL.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 PRICE: $20.00.

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004363

PUBLICATION DATE: 79

TITLE: MEASUREMENT OF ORGANIC POLLUTANTS IN WATER AND WASTEWATER.

PERSONAL AUTHOR: VAN HALL, C. E., EDITOR

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICAL ANALYSIS; *DRINKING WATER; ENVIRONMENT; INDUSTRY; INSTRUMENTATION; *MEASUREMENT; *ORGANIC CHEMISTRY; *ORGANIC COMPOUNDS; POLLUTION; RESEARCH; SAMPLING; *SYMPOSIA; *WATER TREATMENT; WASTEWATER; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 357P.

ABSTRACT: PRESENTED ARE THE PROCEEDINGS OF THE SYMPOSIUM ON THE MEASUREMENT OF ORGANIC POLLUTANTS IN WATER AND WASTEWATER SPONSORED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS AT DENVER, COLORADO, IN JUNE 1978. THIS PUBLICATION CONTAINS THE KEYNOTE ADDRESS, A COLLOQUIUM ON THE IMPACT OF THE CONSENT DECREE ON ANALYTICAL CHEMISTRY IN INDUSTRY, AND 20 PAPERS DEALING WITH THE MOST RECENT METHODOLOGY ON ORGANIC MATERIALS IN WATER. EMPHASIS IS PLACED ON ALL ASPECTS OF THE TOTAL ANALYSIS SYSTEM INCLUDING SAMPLING, PRESERVATION, PREPARATION, MEASUREMENT, CONFIRMATION, AND VALIDATION.

AVAILABILITY: AMERICAN SOCIETY FOR TESTING AND MATERIALS, 1916 RACE STREET, PHILADELPHIA, PA 19103 $36.50

IRIS ACCESSION NUMBER: EW004365

PUBLICATION DATE: 79

TITLE: APPROPRIATE TECHNOLOGY IN WATER SUPPLY AND WASTE DISPOSAL.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *DEVELOPING NATIONS; *EUROPE; ECONOMICS; ENGINEERING; *FACILITIES; LAND USE; *PUBLIC HEALTH; RESEARCH; *SCIENCES; *TECHNOLOGY; *WATER SUPPLY; *WASTEWATER TREATMENT; *WATER TREATMENT; WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 270P.

ABSTRACT: THIS DOCUMENT CONTAINS THE PAPERS PRESENTED AT THE AMERICAN SOCIETY OF CIVIL ENGINEERS MEETING IN 1978. THE PAPERS REVIEW CURRENT INFORMATION AND DEAL WITH HISTORICAL, BEHAVIORAL, ECONOMIC, PUBLIC HEALTH, ENGINEERING AND ENVIRONMENTAL DETERMINANTS. INFORMATION FROM CASE STUDIES IN BOTH DEVELOPING AND INDUSTRIAL COUNTRIES IS PRESENTED. TOPICS DISCUSSED INCLUDE: ECONOMIC INCENTIVES AND APPROPRIATE TECHNOLOGY IN VILLAGE WATER SUPPLY; SIMPLIFIED WATER TREATMENT PLANT DESIGN; LAND TREATMENT SYSTEMS AND THE ENVIRONMENT; AND SYSTEMS OF WASTEWATER MANAGEMENT IN EUROPE.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 PRICE: $16.00

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004366

PUBLICATION DATE: 77

TITLE: GUIDE FOR COLLECTION, ANALYSIS, AND USE OF URBAN STORMWATER DATA.

DESCRIPTOR: *DATA COLLECTION; ENVIRONMENTAL INFLUENCES; ENGINEERING; *INSTRUMENTATION; *LAND USE; MUNICIPALITIES; MODELS; *STORM RUNOFF; *URBAN ENVIRONMENT; WATER RESOURCES; *WATER POLLUTION CONTROL; WATER QUALITY.

DESCRIPTIVE NOTE: 115P.

ABSTRACT: THIS REPORT PRESENTS GUIDELINES FOR DESIGNING A DATA COLLECTION PROGRAM TO DEFINE URBAN-RUNOFF PROBLEMS, TO CALIBRATE AND VERIFY URBAN-RUNOFF MODELS, AND TO MONITOR THE EFFECTIVENESS OF SOLUTIONS. TOPICS DISCUSSED INCLUDE: DETERMINATION OF PROBABILITIES; MODEL ANALYSIS; NETWORK PLANNING AND DESIGN; CATCHMENT SELECTION; INSTRUMENTATION; AND DATA COLLECTION PROCEDURES.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017. PRICE: $5.00.

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004367

PUBLICATION DATE: 79

TITLE: WATER SYSTEMS

DESCRIPTOR: *ABSTRACTS; DECISION-MAKING; ENVIRONMENTAL INFLUENCES; ENGINEERING; *MANAGEMENT; MODELS; *PLANNING; *RESEARCH; TECHNOLOGY; *WATER DISTRIBUTION; *WATER RESOURCES; WATER SUPPLY; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 225P.

ABSTRACT: THIS DOCUMENT CONTAINS THE ABSTRACTS OF PAPERS PRESENTED AT AN ASCE CONFERENCE ON INTERDISCIPLINARY APPROACHES TO PLANNING AND MANAGING WATER RESOURCE SYSTEMS. THE TOPICS ADDRESSED INCLUDE: NATIONAL POLICY ISSUES; MATHEMATICAL MODELING; DATA ACQUISITION; WATER DISTRIBUTION SYSTEMS; HYDROELECTRIC POWER SYSTEMS; WATER RESOURCES PLANNING; THE IMPACTS OF ENERGY DEVELOPMENT ON WATER RESOURCES; AND SOCIAL AND ENVIRONMENTAL CONSIDERATIONS.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 (PRICE: $12.00).

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004368

PUBLICATION DATE: 79

TITLE: WATER PROBLEMS OF URBANIZING AREAS.

DESCRIPTOR: *CONFERENCES; DECISION-MAKING; ECONOMICS; ENGINEERING; ENVIRONMENTAL INFLUENCES; LEGISLATION; *MANAGEMENT; *PLANNING; *RESEARCH; TECHNOLOGY; *URBAN AREAS; *WATER QUALITY; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 348P.

ABSTRACT: THIS DOCUMENT CONTAINS THE PAPERS PRESENTED AT A CONFERENCE ADDRESSING THE WATER RELATED PROBLEMS OF AREAS UNDERGOING THE PROCESS OF URBANIZATION. SECTION I PROVIDES AN OVERVIEW OF THE PROBLEMS IN LIGHT OF THE 208 PLANNING PROCESS. SECTIONS II, III, AND IV DISCUSS TECHNOLOGY WATER QUALITY, AND WATER SUPPLY AND FLOOD CONTROL. INCLUDED ARE RECOMMENDATIONS FOR IMMEDIATE AND LONG RANGE RESEARCH NEEDS.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 PRICE: $18.00

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004369

PUBLICATION DATE: 75

TITLE: PIPELINE DESIGN FOR WATER AND WASTEWATER.

DESCRIPTOR: COST EFFECTIVENESS; *COLLECTION SYSTEMS; *DISTRIBUTION SYSTEMS; *DESIGN; ENVIRONMENTAL INFLUENCES; *ENGINEERING; EQUIPMENT; GUIDELINES; *HYDRAULICS; *PIPES; UTILITIES; *WASTEWATER TREATMENT; *WATER SUPPLY; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 127P.

ABSTRACT: THIS DOCUMENT CONTAINS THE REPORT OF THE ASCE TASK COMMITTEE ON ENGINEERING PRACTICE IN THE DESIGN OF PIPELINES. IN ADDITION TO WATER AND WASTEWATER CHARACTERISTICS AND TYPES OF FLOW, THE TEXT DISCUSSES: THE USE OF PUMPS; WATER HAMMER CONSIDERATIONS; TRANSMISSION AND FEEDER MAINS; PIPE MATERIALS; AND PIPELINE ECONOMICS.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 (PRICE: $4.00).

INSTITUTION NAME: AMERICAN SOCIETY OF CIVIL ENGINEERS.

IRIS ACCESSION NUMBER: EW004372

PUBLICATION DATE: APR 79

TITLE: AQUATIC TOXICOLOGY.

PERSONAL AUTHOR: MARKING, L. L.; KIMERLE, R. A., EDITORS

DESCRIPTOR: *AQUATIC ENVIRONMENT; CHEMICAL ANALYSIS; *ECOLOGICAL INFLUENCES; ECOLOGY; FISH; INSTRUMENTATION; *MEASUREMENT; MEETINGS; *PESTICIDES; *PHYSIOLOGY; RESEARCH; *SYMPOSIA; *TOXICOLOGY; WASTEWATER; *WATER POLLUTION CONTROL; ZOOLOGY

DESCRIPTIVE NOTE: 392P.

ABSTRACT: PRESENTED ARE THE PROCEEDINGS OF THE SECOND ANNUAL SYMPOSIUM ON AQUATIC TOXICOLOGY SPONSORED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS THROUGH ITS COMMITTEE E-35 ON PESTICIDES AT CLEVELAND, OHIO, IN OCTOBER 1977. THIS PUBLICATION, CONSISTING OF 25 PAPERS, ADDRESSES FOUR SUBJECT AREAS (1) APPLICATIONS AND PRINCIPLES OF PHYSIOLOGICAL TOXICOLOGY, (2) TOXICOLOGICAL METHODOLOGY AND DATA, (3) BIOACCUMULATION OF AQUATIC CONTAMINANTS, AND (4) THE FATE OF CHEMICALS IN THE ENVIRONMENT.

AVAILABILITY: AMERICAN SOCIETY FOR TESTING AND MATERIALS, 1916 RACE STREET, PHILADELPHIA, PA 19103 PRICE $37.75

IRIS ACCESSION NUMBER: EW004373

PUBLICATION DATE: 79

TITLE: AVIAN AND MAMMALIAN WILDLIFE TOXICOLOGY.

PERSONAL AUTHOR: KENAGA, E. E., EDITOR

DESCRIPTOR: *BIRDS; ENVIRONMENT; *FIELD STUDIES; *HAZARD ASSESSMENT; *MAMMALS; *PESTICIDES; POLLUTION CONTROL;PHYSIOLOGY; *RESEARCH METHODOLOGY; RESEARCH; TOXICANTS; *TOXICOLOGY; *WILDLIFE MANAGEMENT; *ZOOLOGY

DESCRIPTIVE NOTE: 97P.

ABSTRACT: COMPILED ARE EIGHT PAPERS PRESENTED AT A FORUM FOR DISCUSSION OF RECENT ADVANCES IN AVIAN AND MAMMALIAN WILDLIFE TOXICOLOGY AT THE 1978 NEW ORLEANS MEETING OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS PESTICIDE SUBCOMMITTEE. ADDRESSED IN THESE PAPERS ARE THE TYPICAL PROBLEMS ENCOUNTERED IN TRYING TO OBTAIN REALISTIC DATA TO ESTIMATE THE HAZARD TO WILD BIRDS AND MAMMALS FROM A VARIETY OF MANUFACTURED CHEMICALS.

AVAILABILITY: AMERICAN SOCIETY FOR TESTING AND MATERIALS, 1916 RACE STREET, PHILADELPHIA, PA 19103 PRICE $16.25

IRIS ACCESSION NUMBER: EW004375

PUBLICATION DATE: 79

TITLE: HAZARDOUS AND TOXIC EFFECTS OF INDUSTRIAL CHEMICALS.

PERSONAL AUTHOR: SITTIG, MARSHALL

DESCRIPTOR: CHEMISTRY; *ENVIRONMENTAL INFLUENCES; *HAZARDOUS MATERIALS; *INDUSTRIAL HYGIENE; OCCUPATIONAL DISEASES; POLLUTION; *SAFETY; *STANDARDS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 470P.

ABSTRACT: THIS BOOK PRESENTS INFORMATION ON 250 TOXIC OR POTENTIALLY TOXIC SUBSTANCES WHICH MAY BE FOUND ASSOCIATED WITH VARIOUS OCCUPATIONS. FOR EACH ENTRY THE TEXT DISCUSSES: A DESCRIPTION OF THE SUBSTANCE; POTENTIAL OCCUPATIONAL EXPOSURES; PERMISSIBLE EXPOSURE LIMITS; ROUTE OF ENTRY; HARMFUL EFFECTS; MEDICAL SURVEILLANCE AND TESTING; AND PERSONAL PROTECTIVE METHODS.

AVAILABILITY: NOYES DATA CORPORATION, NOYES BUILDING, PARK RIDGE, NJ 07656 PRICE: $42.00

IRIS ACCESSION NUMBER: EW004376

PUBLICATION DATE: 77

TITLE: FILTER AIDS AND MATERIALS TECHNOLOGY AND APPLICATIONS.

PERSONAL AUTHOR: DRISCOLL, HENRY T.

DESCRIPTOR: CHEMISTRY; DESIGN; *EQUIPMENT; ENVIRONMENTAL INFLUENCES; *FILTERS; *FILTRATION; HYDRAULICS; *INDUSTRY; *PATENTS; OPERATIONS (WATER); OPERATIONS (WASTEWATER); *TECHNOLOGY; *WATER QUALITY.

DESCRIPTIVE NOTE: 307P.

ABSTRACT: THIS BOOK PROVIDES AN IN DEPTH LOOK AT THE FILTRATION PROCESSES WHICH HAVE BEEN DESCRIBED IN THE PATENT LITERATURE IN RECENT YEARS. MANY OF THE PROCESSES DESCRIBED ARE GENERAL IN NATURE AND CAN BE APPLIED TO STANDARD INDUSTRIAL FILTRATION REQUIREMENTS; HOWEVER, SOME HIGHLY DEMANDING PROCESSES ARE DISCUSSED. TOPICS INCLUDE: PARTICULATE FILTER MEDIA; GENERAL FILTER CONSTRUCTION; HEAVY METAL SEPARATION; GAS FILTRATION; POLYMER FILTRATION; AND CHROMATOGRAPHIC SEPARATION TECHNIQUES.

AVAILABILITY: NOYES DATA CORPORATION, NOYES BUILDING, PARK RIDGE, NJ 07656 (PRICE: $39.00).

IRIS ACCESSION NUMBER: EW004377

PUBLICATION DATE: 79

TITLE: WATER RESOURCES ASSESSMENT-METHODOLOGY AND TECHNOLOGY SOURCEBOOK.

PERSONAL AUTHOR: CANTER, LARRY W.

DESCRIPTOR: *ENVIRONMENTAL INFLUENCES; ENGINEERING; *EVALUATION METHODS; LITERATURE REVIEWS; *ENVIRONMENTAL IMPACT ASSESSMENT; *NATURAL RESOURCES; PLANNING; RESEARCH; TECHNOLOGY; *WATER RESOURCES.

DESCRIPTIVE NOTE: 530P.

ABSTRACT: THIS BOOK PRESENTS A COMPREHENSIVE REVIEW AND EVALUATION OF METHODOLOGIES AND TECHNOLOGIES THAT ARE, OR MAY BE, USED IN ENVIRONMENTAL IMPACT ASSESSMENT CONCERNED WITH WATER RESOURCES PROGRAMS AND PROJECTS. EACH OF THE REFERENCES CITED MET THE CRITERIA ESTABLISHED BY THE INVESTIGATOR. THE LITERATURE REVIEWED ENCOMPASSES THE PERIOD FROM PRE-NEPA THROUGH 1978.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, INC., PO BOX 1425, ANN ARBOR, MICHIGAN 48106 (PRICE: $35.00)

IRIS ACCESSION NUMBER: EW004378

PUBLICATION DATE: 64

TITLE: WATER DISTRIBUTION SYSTEM COURSE WORKBOOK.

PERSONAL AUTHOR: HANHILAMMI, R. JOHN

DESCRIPTOR: *ADULT EDUCATION; CHEMISTRY; *DRINKING WATER; EDUCATIONAL PROGRAMS; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; MANPOWER DEVELOPMENT; MATHEMATICS; *OPERATIONS (WATER TREATMENT); OPERATOR TRAINING; *POST SECONDARY EDUCATION; PROFESSIONAL DEVELOPMENT; *TRAINING PROGRAMS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT; WATER RESOURCES; *OHIO

DESCRIPTIVE NOTE: 150P.

ABSTRACT: THIS IS A TRAINING MANUAL FOR WATER AND WASTEWATER PERSONNEL ON WATER DISTRIBUTION SYSTEMS. THE DOCUMENT IS DIVIDED INTO THREE PARTS. REVIEWED IN PART I ARE THE BASIC MATHEMATICAL PRINCIPLES THAT WILL BE USED DURING THE COURSE. CONTAINED IN PART II ARE THEORY AND OPERATION ASSIGNMENTS ON SUCH TOPICS AS SOURCES OF WATER, WATER CHEMISTRY LIME-SODA SOFTENING PROCESSES, IRON REMOVAL AND

ION-EXCHANGE, METERS, HYDRAULICS AND DYNAMICS, PUMPS AND ELECTRICITY, AND A DISTRIBUTION SYSTEM. PART III PRESENTS SOME PRINCIPLES OF ELEMENTARY CHEMISTRY.

AVAILABILITY: OPERATOR TRAINING COMMITTEE OF OHIO, INC., PO BOX 626, WORTHINGTON, OHIO 43085 PRICE: $8.00

IRIS ACCESSION NUMBER: EW004379

PUBLICATION DATE: 79

TITLE: WATER TREATMENT LABORATORY COURSE I MANUAL.

PERSONAL AUTHOR: BOWERSOX, DONALD

DESCRIPTOR: *ADULT EDUCATION; CHEMISTRY; *DRINKING WATER; EDUCATIONAL PROGRAMS; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *LABORATORY PROCEDURES; MANPOWER DEVELOPMENT; *OPERATIONS (WATER TREATMENT); OPERATOR TRAINING; *POST SECONDARY EDUCATION; PROFESSIONAL DEVELOPMENT; RECORDS; RECORD KEEPING; SAFETY; SAMPLING; *TRAINING PROGRAMS; *WATER TREATMENT; WATER RESOURCES; *OHIO

DESCRIPTIVE NOTE: 198P.

ABSTRACT: THIS IS A LABORATORY TRAINING MANUAL FOR WATER AND WASTEWATER PERSONNEL ON LABORATORY OPERATIONS AND TESTS RELATED TO WATER TREATMENT. LABORATORY OPERATIONS DETAILED ARE SAMPLING, LABORATORY EQUIPMENT AND SAFETY, DATA HANDLING AND RECORDS, AND BASIC CHEMISTRY. TEST PROCEDURES AND DISCUSSION ARE INCLUDED FOR THE FOLLOWING BASIC LABORATORY TESTS: PH, TEMPERATURE, TURBIDITY, CHLORINE, ALKALINITY, CARBONATE STABILITY, HARDNESS, CALCIUM, MAGNESIUM, CHLORIDES, TASTE AND ODOR, TOTAL SOLIDS AND, IRON AND MANGANESE.

AVAILABILITY: OPERATOR TRAINING COMMITTEE OF OHIO, INC., BOX 626, WORTHINGTON, OHIO 43085 PRICE $15.00

IRIS ACCESSION NUMBER: EW004381

PUBLICATION DATE: 75

TITLE: WATER TREATMENT SECOND COURSE WORKBOOK.

PERSONAL AUTHOR: BLANCHARD, D. A.; MAIR, D. M.

DESCRIPTOR: *ADULT EDUCATION; *DRINKING WATER; EDUCATIONAL PROGRAMS; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; MANPOWER DEVELOPMENT; MEASUREMENT; *OPERATIONS (WATER TREATMENT); OPERATOR TRAINING; *POST SECONDARY EDUCATION; PROFESSIONAL DEVELOPMENT; *TRAINING PROGRAMS; *WATER SUPPLY; *WATER TREATMENT; WATER RESOURCES; *OHIO

DESCRIPTIVE NOTE: 263P.

ABSTRACT: THIS IS A TRAINING MANUAL FOR A SECOND COURSE IN WATER TREATMENT FOR WATER AND WASTEWATER PERSONNEL. THE COURSE IS INTENDED FOR THE PERSON WHO HAS OBTAINED AT LEAST A STATE OF OHIO CLASS I CERTIFICATION OR EQUIVALENT EDUCATION IN WATER TREATMENT. ADDRESSED IN THE SECOND COURSE ARE TERMINOLOGY TO BE USED IN THE WATER SUPPLY FIELD, FLOW DIAGRAMS, DESIGN DATA FOR MODEL PLANTS, OPERATING DATA FOR MODEL PLANTS, AND A SET OF 27 ASSIGNMENTS ON WATER TREATMENT PLANT THEORY AND OPERATIONS.

AVAILABILITY: OPERATOR TRAINING COMMITTEE OF OHIO, INC., PO BOX 626, WORTHINGTON, OHIO 43085 PRICE $15.00

IRIS ACCESSION NUMBER: EW004382

PUBLICATION DATE: 75

TITLE: WATER TREATMENT FIRST COURSE WORKBOOK.

PERSONAL AUTHOR: BLANCHARD, D.A.

DESCRIPTOR: *ADULT EDUCATION; *DRINKING WATER; EDUCATIONAL PROGRAMS; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; MANPOWER DEVELOPMENT; MEASUREMENT; *OPERATIONS (WATER); OPERATOR TRAINING; *POST SECONDARY EDUCATION; PROFESSIONAL DEVELOPMENT; *TRAINING PROGRAMS; *WATER TREATMENT; WATER RESOURCES

DESCRIPTIVE NOTE: 174P.

ABSTRACT: PRESENTED IS THE TRAINING MANUAL FOR A FIRST COURSE IN WATER TREATMENT FOR WATER AND WASTE WATER PERSONNEL. BY SIMULATING THE ACTUAL QUESTIONS AND PROBLEMS THAT MAY BE ENCOUNTERED BY THE WATER TREATMENT PLANT OPERATOR, THE COURSE ADDRESSES THE FOLLOWING: MATHEMATICS REVIEW AND DESIGN DATA, FLOW DIAGRAMS FOR TWO MODEL PLANTS, IRON REMOVAL AND ION EXCHANGE SOFTENING AND LIME-SODA ASH SOFTENING, PRESENT OPERATING DATA FOR MODEL PLANTS, AND A SET OF 28 ASSIGNMENTS ON WATER TREATMENT PLANT THEORY AND OPERATIONS.

AVAILABILITY: OPERATOR TRAINING COMMITTEE OF OHIO, INC., PO BOX 626, WORTHINGTON, OHIO 43085 (PRICE: $12.00)

IRIS ACCESSION NUMBER: EW004383

PUBLICATION DATE: 79

TITLE: BEST MANAGEMENT PRACTICES FOR AGRICULTURE AND SILVICULTURE.

PERSONAL AUTHOR: LOEHR, RAYMOND C.; AND OTHERS.

DESCRIPTOR: *AGRICULTURE; *CONFERENCE REPORTS; COST EFFECTIVENESS; ECONOMICS; EROSION CONTROL; FORESTRY; *MANAGEMENT; MODELS; *NONPOINT SOURCE POLLUTION; NUTRIENTS; PLANNING; POLLUTION; *SILVICULTRUE; STATE-OF-THE-ART-REVIEWS; WASTES; *WATER POLLUTION CONTROL; WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 740P.

ABSTRACT: PRESENTED ARE THE PROCEEDINGS OF THE 1978 CORNELL AGRICULTURAL WASTE MANAGEMENT CONFERENCE. THE THEME WAS THE

CONTROL OF AGRICULTURAL AND SILVICULTURAL NONPOINT SOURCES THROUGH APPROPRIATE MANAGEMENT PRACTICES. COMPILED ARE 45 PAPERS INTO SEVEN SECTIONS: GOVERNMENTAL ASPECTS; APPROACHES FOR BMP SELECTION; NUTRIENT MANAGEMENT; SILVICULTURE; ECONOMIC, POLICY, AND INSTITUTIONAL ASPECTS; STATE AND WATERSHED APPROACHES; AND MODELING STUDIES. TECHNICAL ASPECTS AND THE ECONOMIC, SOCIAL, AND INSTITUTIONAL CONSIDERATIONS NECESSARY TO SELECTING AND IMPLEMENTING BEST MANAGEMENT PRACTICES ARE DISCUSSED.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, INC., PO BOX 1425, ANN ARBOR, MICHIGAN 48106 PRICE: $40.00

IRIS ACCESSION NUMBER: EW004384

PUBLICATION DATE: 77

TITLE: MANAGEMENT AND LAW FOR WATER RESOURCES.

PERSONAL AUTHOR: CUNHA, LUIS V.; AND OTHERS

DESCRIPTOR: *GOVERNMENT ROLE; INCENTIVE GRANTS; INCENTIVE SYSTEMS; *INTERNATIONAL LAW; *LAWS; LEGAL PROBLEMS; *MANAGEMENT; *PORTUGAL; *PUBLIC POLICY; STANDARDS; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 372P.

ABSTRACT: THE AIM OF THIS BOOK IS TO EXAMINE BOTH THE PRINCIPLES FOR A WATER RESOURCES MANAGEMENT POLICY, TOGETHER WITH ITS ECONOMIC AND SOCIAL REPERCUSSIONS, AND ALSO THE LEGAL IMPLEMENTATION OF THOSE PRINCIPLES, TAKING INTO CONSIDERATION THE CRITICAL ANALYSIS OF NATIONAL LEGISLATION FOR WATER RESOURCES MANAGEMENT AS WELL AS INTERNATIONAL LEGISLATION ON INLAND AND MARITIME WATERS. THE BOOK IS INTENDED TO BE A STATE-OF-THE-ART DESCRIPTION AND A REFLECTION ON WATER RESOURCES MANAGEMENT PROBLEMS AND WATER LEGISLATION PROBLEMS. IT WAS WRITTEN AS A FOLLOW-UP TO A PREVIOUS WORK BY THE SAME AUTHORS, AIMING AT DEFINING A NEW POLICY FOR WATER RESOURCES MANAGEMENT IN PORTUGAL (CUNHA ET AL.1974).

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 303, FORT COLLINS, COLORADO 80522 PRICE $26.00

IRIS ACCESSION NUMBER: EW004385

PUBLICATION DATE: 77

TITLE: TECHNOLOGY ASSESSMENT FOR WATER SUPPLIES.

PERSONAL AUTHOR: VLACHOS, EVAN AND HENDRICKS, DAVID W.

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; *EVALUATION METHODS; LAND USE; NATURAL RESOURCES; *PLANNING; *PUBLIC POLICY; *REGIONAL PLANNING; TECHNOLOGY; WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 268P.

ABSTRACT: QUESTIONS EMERGING IN WATER RESOURCE PLANNING ARE DISCUSSED WITHIN THIS BOOK. SUCH QUESTIONS INCLUDE CONSIDERATION OF PROJECT INDUCED COMMUNITY GROWTH; DETERIORATION OF WATER QUALITY; AND LOW STREAM FLOWS. SUCH QUESTIONS ARE ADDRESSED BY OFFERING APPROACHES TO THEIR SOLUTION THROUGH TECHNOLOGY ASSESSMENT. PAST POLICY ON WATER RESOURCE PLANNING IS EXAMINED. THE NATURE OF WATER PROJECTS AND THEIR SIDE EFFECTS ARE DISCUSSED. TECHNIQUES OF FORECASTING AND CONSEQUENCES OF PROJECTS ARE DISCUSSED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE$14.00

IRIS ACCESSION NUMBER: EW004386

PUBLICATION DATE: 78

TITLE: FREQUENCY AND RISK ANALYSES IN HYDROLOGY.

PERSONAL AUTHOR: KITE, G. W.

DESCRIPTOR: *DATA; DROUGHTS; *FLOODS; FREQUENCY ANALYSIS; *HYDROLOGY; *MEASUREMENT; MODELS; *RESEARCH; *RISK ANALYSIS; *STATISTICAL ANALYSIS; *WATER RESOURCES

DESCRIPTIVE NOTE: 224P.

ABSTRACT: DESCRIBED IN THIS REPORT ARE SOME ASPECTS OF FREQUENCY AND RISK ANALYSES AS USED IN HYDROLOGY. TECHNIQUES TO BE USED IN FLOOD FREQUENCY ANALYSIS AND DROUGHT ANALYSIS, TOGETHER WITH AN ANALYSIS OF THE ASSOCIATED RISK ARE DISCUSSED. ALL FREQUENCY TECHNIQUES ARE TOTALLY DATA-DEPENDENT. DATA REQUIREMENTS AND THE BASIC ASSUMPTIONS INVOLVED IN THE SUBSEQUENT ANALYSES ARE IDENTIFIED. DESCRIBED, FOR DISTRIBUTIONS COMMONLY USED IN HYDROLOGY, ARE THE FORM OF THE DISTRIBUTION, ESTIMATION OF PARAMETERS, ESTIMATION OF EVENTS AT GIVEN RETURN PERIODS AND ESTIMATION OF CONFIDENCE LIMITS. METHODS OF REGIONAL FLOOD FREQUENCY ANALYSIS PRESENTLY AVAILABLE ARE DISCUSSED AND STATISTICAL METHODS AVAILABLE TO ANALYZE THE ASSOCIATED RISKS ARE REVIEWED.

AVAILABILITY: WATER RFSOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE $10.00

IRIS ACCESSION NUMBER: EW004387

PUBLICATION DATE: 77

TITLE: HYDRAULIC PROBLEMS SOLVED BY STOCHASTIC METHODS.

PERSONAL AUTHOR: EDITORS: HJORTH, PEDER; AND OTHERS.

DESCRIPTOR: DATA ANALYSIS; *ENGINEERING; ENGINEERING EDUCATION; EVALUATION METHODS; *HYDRAULICS; MATHEMATICS; *MODELS; POST SECONDARY EDUCATION; SIMULATION; *STATISTICAL ANALYSIS; STATISTICS; *STOCHASTIC METHODS; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 602P.

ABSTRACT: THIS COLLECTION OF PAPERS DEALS WITH THE APPLICATION OF STOCHASTIC METHODS TO PROBLEMS IN SPECIFIC AREAS OF HYDRAULICS APPLICATIONS. INCLUDED ARE THE AREAS OF TURBULENCE, SEDIMENT TRANSPORTATION AND EROSION, FLOW IN POROUS MEDIA, AND WAVES AND FORCES ON STRUCTURES. TWENTY-EIGHT PAPERS COMPRISE THE COLLECTION.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE $22.00

IRIS ACCESSION NUMBER: EW004388

PUBLICATION DATE: 77

TITLE: STOCHASTIC PROCESSES IN WATER RESOURCES ENGINEERING.

PERSONAL AUTHOR: EDITORS: GOTTSCHALK, LARS; AND OTHERS

DESCRIPTOR: DATA ANALYSIS; *ENGINEERING; ENGINEERING EDUCATION; EVALUATION METHODS; *HYDRAULICS; MATHEMATICS; *MODELS; POST SECONDARY EDUCATION; SIMULATION; *STATISTICAL ANALYSIS; STATISTICS; *STOCHASTIC METHODS; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 552P.

ABSTRACT: THIS COLLECTION OF PAPERS DEALS WITH THE APPLICATION OF STOCHASTIC METHODS TO CONCERNS OF WATER RESOURCES MANAGEMENT. PRINCIPAL DIVISIONS OF THE COLLECTION INCLUDE: (1) ANALYSIS AND SIMULATION OF STOCHASTIC HYDRAULIC PROCESSES; (2) RISK ANALYSIS; AND (3) WATER RESOURCES SYSTEMS. TWENTY-FIVE PAPERS ARE INCLUDED IN THE COLLECTION.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE $20.00

IRIS ACCESSION NUMBER: EW004389

PUBLICATION DATE: 77

TITLE: SEDIMENT TRANSPORT TECHNOLOGY.

PERSONAL AUTHOR: SIMONS, DARYL B.; SENTURK, FUAT.

DESCRIPTOR: *CIVIL ENGINEERING; DESIGN; ENGINEERING EDUCATION; *EROSION CONTROL; HYDRAULICS; *INSTRUCTIONAL MATERIALS; MECHANICS (PHYSICS); POST SECONDARY EDUCATION; *REFERENCE MATERIALS; *RIVERS; *SEDIMENTATION; *SEDIMENT TRANSPORT; STREAM CHANNELIZATION; *TECHNOLOGY; WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: 807P.

ABSTRACT: INTENDED AS A TEACHING AID OR A REFERENCE DOCUMENT, THIS TEXT PRESENTS THE MECHANICS OF FLOW AND SEDIMENT TRANSPORT IN CANALS AND RIVERS. THE DOCUMENT IS DIVIDED INTO NINE CHAPTERS. CHAPTER 1 EMPHASIZES THE NECESSITY OF VIEWING WATERSHEDS AS DYNAMIC, PHYSICAL, ECOLOGICAL SYSTEMS AND OUTLINES ECOLOGICAL CONSIDERATIONS AND ENGINEERING REQUIREMENTS FOR RIVER DEVELOPMENT PROGRAMS. CHAPTER 2 INTRODUCES RIVER MORPHOLOGY AND RIVER RESPONSE. PRESENTED IN CHAPTER 3 IS THE HYDRAULICS OF OPEN CHANNEL FLOW. CHAPTER 4 INTRODUCES THE PHYSICAL AND DYNAMIC CHARACTERISTICS OF SEDIMENT PARTICLES. PRESENTED AND ILLUSTRATED IN CHAPTER 5 ARE THE BASIC CONCEPTS OF REGIMES OF FLOW, FORMS OF BED ROUGHNESS, AND THEIR PREDICTION. AN EXAMINATION OF RESISTANCE TO FLOW IS PRESENTED IN CHAPTER 6. CHAPTER 7 PROVIDES THE BASIC CONCEPTS OF MOTION AND ITS APPLICATION TO CHANNEL DESIGN AND CHANNEL STABILIZATION. CHAPTER 8 PRESENTS THE MOST COMMONLY UTILIZED TRANSPORT THEORIES AND CHAPTER 9 TREATS THE PROBLEMS ASSOCIATED WITH SCOUR, AGGRADATION, AND DEGRADATION.

AVAILABILITY: WATER RESOURCES PUBLICATION, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $30.00

IRIS ACCESSION NUMBER: EW004390

PUBLICATION DATE: 73

TITLE: ENVIRONMENTAL IMPACT ON RIVERS (RIVER MECHANICS III).

PERSONAL AUTHOR: EDITOR; SHEN, HSIEH WEN.

DESCRIPTOR: CHEMISTRY; *ENVIRONMENT; ENVIRONMENTAL CRITERIA; *ENVIRONMENTAL INFLUENCES; MATHEMATICS; NATURAL RESOURCES; PHYSICS; *POLLUTION; *PLANNING; *RIVERS; *REGULATIONS; TECHNOLOGY; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 680P.

ABSTRACT: THE BOOK DESCRIBES CURRENT KNOWLEDGE ON VARIOUS ASPECTS OF ALLUVIAL RIVERS, AND SPECIFICALLY PRESENTS A COMPREHENSIVE COLLECTION OF INFORMATION RELATED TO RIVER MECHANICS. DISCUSSIONS OF RIVER ECOLOGY, DEVELOPMENTS IN FEDERAL REGULATIONS AND GUIDELINES FOR WATER RESOURCE PROJECTS, AND RIVER BASIN PLANNING ARE ALSO INCLUDED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE $20.00

IRIS ACCESSION NUMBER: EW004391

PUBLICATION DATE: 75

TITLE: ENVIRONMENTAL DESIGN FOR PUBLIC PROJECTS.

PERSONAL AUTHOR: HENDRICKS, DAVID W.; AND OTHERS (EDITORS)

DESCRIPTOR: *CITY PLANNING; *CIVIL ENGINEERING; *CONSTRUCTION; *DESIGN; ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; *INTERDISCIPLINARY APPROACH; *PLANNING; PROJECTS; *POST SECONDARY EDUCATION

DESCRIPTIVE NOTE: 742P.

ABSTRACT: THIS VOLUME FOCUSES ON ENVIRONMENTAL QUESTIONS RELATING TO LARGE SCALE ENGINEERING FACILITIES. CONSIDERED

ARE DAMS, HIGHWAYS, POWER PLANTS, TRANSMISSION LINES, ETC. TWO KEY QUESTIONS ARE CENTRAL TO THE TEXT: (1) WHAT ARE THE PRIMARY EFFECTS CAUSED BY PHYSICAL PRESENCE OF A PUBLIC PROJECT; AND (2) WHAT ARE THE SECONDARY OR INDUCED CONSEQUENCES RESULTING FROM THE FUNCTIONING OF A PUBLIC PROJECT. COROLLARY CONSIDERATION OF HOW TO MITIGATE UNDESIRED EFFECTS BY DESIGN INCORPORATIONS ARE CONSIDERED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE $20.00

IRIS ACCESSION NUMBER: EW004392

PUBLICATION DATE: 76

TITLE: STOCHASTIC APPROACHES TO WATER RESOURCES. VOLUME I.

PERSONAL AUTHOR: SHEN, HSIEH WEN (EDITOR)

DESCRIPTOR: EARTH SCIENCE; ENGINEERING EDUCATION; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *EVALUATION METHODS; *INSTRUCTIONAL MATERIALS; *POST SECONDARY EDUCATION; SCIENCES; *STATISTICAL ANALYSIS; *STATISTICS; *STOCHASTIC METHODS; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 540P.

ABSTRACT: THIS BOOK IS INTENDED TO DESCRIBE CURRENT KNOWLEDGE ON THE APPLICATION OF STOCHASTIC METHODS TO VARIOUS WATER RESOURCES PROBLEMS. IT IS DESIGNED TO PRESENT A REASONABLY COMPREHENSIVE COLLECTION OF INFORMATION IN THIS FIELD AND CAN BE USED AS A TEXTBOOK AS WELL AS A REFERENCE BOOK FOR PRACTICING ENGINEERS, SCIENTISTS, ADMINISTRATORS, PLANNERS, AND PROFESSORS.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $30.00 FOR VOL. I & II.

IRIS ACCESSION NUMBER: EW004393

PUBLICATION DATE: 76

TITLE: STOCHASTIC APPROACHES TO WATER RESOURCES VOLUME II.

PERSONAL AUTHOR: EDITOR: SHEN, HSIEH WEN.

DESCRIPTOR: EVALUATION METHODS; *MATHEMATICAL MODELS; MATHEMATICS; PHYSICS; PLANNING; *PROBABILITY THEORY; *RESEARCH; *STATISTICS; *STOCHASTIC TECHNIQUES; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 532P.

ABSTRACT: THIS SECOND VOLUME RELATING STATISTICS TO WATER RESOURCES PROBLEMS DEALS EXTENSIVELY WITH THE USE OF STOCHASTIC TECHNIQUES FOR PLANNING WATER RESOURCE PROGRAMS. TWENTY-SEVEN PAPERS ARE INCLUDED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE: $30.00 FOR VOL. I & II.

IRIS ACCESSION NUMBER: EW004394

PUBLICATION DATE: 72-74

TITLE: DRAINAGE PRINCIPLES AND APPLICATIONS...VOLUMES I, II, III & IV.

DESCRIPTOR: AGRICULTURE; CIVIL ENGINEERING; *DESIGN; DRAINAGE SYSTEMS; *ENGINEERING; GLOBAL APPROACH; *GROUNDWATER; *HIGHER EDUCATION; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; *LAND DRAINAGE; *LAND USE; LECTURES; *MANAGEMENT; NONPOINT SOURCE POLLUTION; *RESEARCH; RUNOFF; *SURVEYS; *WATER RESOURCES; *WATERSHEDS

DESCRIPTIVE NOTE: 1458P.

ABSTRACT: PRESENTED IN THIS FOUR VOLUME SET IS MATERIAL COMPILED FROM THE EDITED LECTURE NOTES OF 30 LECTURERS IN THE INTERNATIONAL COURSE ON LAND DRAINAGE. THE THREE-MONTH COURSE ADDRESSES THE UNDERLYING PRINCIPLES AND THE APPLICATION OF A RATIONAL APPROACH TO LAND DRAINAGE. THE SUBJECTS HAVE BEEN GROUPED SO THAT EACH VOLUME CAN BE CONSULTED INDEPENDENTLY OF THE OTHERS. VOLUME I DESCRIBES THE BASIC ELEMENTS, PHYSICAL LAWS AND CONCEPTS OF THE PLANT-SOIL-WATER SYSTEM. PRESENTED IN VOLUME II ARE THE DRAINAGE THEORIES AND MATHEMATICAL MODELS FOR GROUNDWATER FLOW AND WATERSHED RUNOFF. THE OBJECTIVES OF DRAINAGE FOR SALINITY CONTROL AND THE PREVENTION OF WATER LOGGING ARE FORMULATED. VOLUME III DISCUSSES SURVEYS AND INVESTIGATION TECHNIQUES TO DETERMINE THE PARAMETERS OF THE PLANT-SOIL-WATER SYSTEM. DETAILED IN VOLUME IV ARE THE DESIGN AND DIMENSIONING OF DRAINAGE SYSTEMS, THEIR MAIN ENGINEERING FEATURES, AND ASPECTS OF OPERATION AND MAINTENANCE.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON COLORADO 80151 PRICE $38.00 A SET.

IRIS ACCESSION NUMBER: EW004395

PUBLICATION DATE: JUL 71

TITLE: TREATISE ON URBAN WATER SYSTEMS.

PERSONAL AUTHOR: ALBERTSON, MAURICE L.; AND OTHERS (EDITORS)

DESCRIPTOR: CITY PROBLEMS; CIVIL ENGINEERING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; *INSTRUCTIONAL MATERIALS; *MODELS; *POST SECONDARY EDUCATION; *SYSTEMS ANALYSIS; *SYSTEMS CONCEPTS; SYSTEMS DEVELOPMENT; *URBAN AREAS; UTILITIES; *WATER SUPPLY

DESCRIPTIVE NOTE: 836P.

ABSTRACT: THIS TREATISE INTRODUCES SEVERAL FACETS OF SYSTEMS ANALYSIS AND RELATES THEM TO URBAN WATER PROBLEMS. THE BOOK IS INTENDED TO ENHANCE THE READER'S KNOWLEDGE OF THE APPLICATION OF SYSTEMS ANALYSIS TECHNIQUES. FUTHER ATTENTION IS THEN GIVEN TO APPLICATION OF THESE TECHNIQUES TO SPECIFIC PROBLEMS. IN ADDITION TO THE ENGINEERING ASPECTS OF URBAN WATER SYSTEMS, THE BOOK TREATS ENVIRONMENTAL AND HUMANISTIC FACTORS TO BE CONSIDERED IN PERTINENT SYSTEMS.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $18.00

IRIS ACCESSION NUMBER: EW004396

PUBLICATION DATE: 75

TITLE: UNSTEADY FLOW IN OPEN CHANNELS VOLUMES I, II & III.

PERSONAL AUTHOR: MAHMOOD, K.; YEVJEVICH, V.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; CANALS; *ENGINEERING; CIVIL ENGINEERING; FLOW MEASUREMENT; HYDROLOGY; *INSTRUCTIONAL MATERIALS; LECTURES; MATHEMATICAL APPLICATIONS; *MATHEMATICAL MODELS; *RIVERS; TECHNICAL MATHEMATICS; *UNSTEADY FLOW; WATER RESOURCES; *WATERSHEDS

DESCRIPTIVE NOTE: 1400P.

ABSTRACT: PRESENTED IN THIS THREE-VOLUME BOOK ARE THE LECTURES FOR THE INSTITUTE ON UNSTEADY FLOW IN OPEN CHANNELS HELD AT COLORADO STATE UNIVERSITY IN 1974, AS WELL AS THE BIBLIOGRAPHICAL ABSTRACTS ASSEMBLED AND PREPARED FOR THE BOOK. THE INSTITUTE, ORGANIZED AS A SERIES OF 30 LECTURES BY SPECIALISTS ON VARIOUS PHASES OF UNSTEADY FLOW IN OPEN CHANNELS, PRESENTED CURRENT KNOWLEDGE ON UNSTEADY FLOW IN RIGID AND MOBILE BED, AND NATURAL AND MAN-MADE OPEN CHANNELS. THE BOOK IS ORGANIZED IN TWO PARTS. THE TEXT OF VOLUMES I AND II PROVIDES A COMPREHENSIVE COVERAGE OF UNSTEADY FLOW IN OPEN CHANNELS. VOLUME III, THE ANNOTATED BIBLIOGRAPHY, PROVIDES 1,885 ABSTRACTS OF REFERENCES.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $40.00 FOR THREE VOLUMES.

IRIS ACCESSION NUMBER: EW004397

PUBLICATION DATE: 78

TITLE: SEDIMENT TRANSPORT IN ALLUVIAL STREAMS.

PERSONAL AUTHOR: BOGARDI, JANOS.

DESCRIPTOR: ENGINEERING; *HYDRAULICS; *INSTRUCTIONAL MATERIALS; *MANAGEMENT; *MEASUREMENT; *POST SECONDARY EDUCATION; REGULATION; *RESEARCH; RESEARCH METHODOLOGY; RIVERS; *SEDIMENT; *SEDIMENT TRANSPORT; STREAMS; *WATER RESOURCES; *WATERSHEDS

DESCRIPTIVE NOTE: 826P.

ABSTRACT: PRESENTED IS A REVIEW ON SEDIMENT MOVEMENT, SEDIMENT TRANSPORT IN STREAMS, RIVER REGULATION, AND THE DYNAMICS OF NATURAL WATER COURSES. THE FOCUS OF THE MATERIAL IS RESTRICTED TO SEDIMENT TRANSPORT PHENOMENA IN PLAIN-LAID ALLUVIAL STREAMS. ADDRESSED IN THE TEXT ARE THE THEORETICAL PROBLEMS OF SEDIMENT MOVEMENT, THE INTERRELATIONS OF SEDIMENT AND THE WATER COURSE, AND THE PROCESSING OF SEDIMENT OBSERVATION DATA, THE METHODOLOGICAL PROBLEMS INVOLVED IN THAT PROCESSING, AND THE PRACTICAL VALUE OF THE RESULTS OBTAINED. A DETAILED BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $50.00

IRIS ACCESSION NUMBER: EW004398

PUBLICATION DATE: 78

TITLE: WATER RESOURCES AND THE NATIONAL WELFARE.

PERSONAL AUTHOR: GARSTKA, WALTER U.

DESCRIPTOR: ANTHROPOLOGY; *EARTH SCIENCE; *ECOLOGY; *ENVIRONMENTAL INFLUENCES; GEOLOGY; HYDRAULICS; *INTERDISCIPLINARY APPROACH; KINETICS; MATHEMATICAL MODELS; METEROLOGY; NATURAL RESOURCES; SOIL CONSERVATION; STATISTICS; *WATER RESOURCES

DESCRIPTIVE NOTE: 638P.

ABSTRACT: THIS BOOK COVERS 95 TOPICS RELATED TO WATER RESOURCES MANAGEMENT AND APPROACHES THE TOPIC THROUGH THE PERSPECTIVES OF NUMEROUS DISCIPLINES INCLUDING THE SOCIAL SCIENCES, BIOLOGICAL SCIENCES, PHYSICAL SCIENCES, MATHEMATICS, AND HUMANITIES. IT MAY BE USEFUL BOTH AS A TEXTBOOK AND FOR REFERENCE BY THOSE WHO ARE RESPONSIBLE FOR ENVIRONMENTAL MANAGEMENT IN WHICH WATER PLAYS A DOMINANT ROLE.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, CO 80151 PRICE: $24.00

IRIS ACCESSION NUMBER: EW004399

PUBLICATION DATE: 77

TITLE: GROUND-WATER HYDROLOGY AND HYDRAULICS.

PERSONAL AUTHOR: MCWHORTER, DAVID B.; SUNADA, DANIEL K.

DESCRIPTOR: *ENGINEERING EDUCATION; GEOLOGY; *GROUNDWATER; *HIGHER EDUCATION; *HYDRAULICS; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; MEASURMENT; *WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: 290P.

ABSTRACT: THIS BOOK, DESIGNED FOR USE AS A TEXT IN GROUND-WATER HYDROLOGY FOR SENIORS AND FIRST-YEAR GRADUATE STUDENTS IN AGRICULTURAL AND CIVIL ENGINEERING, GEOLOGY, AND WATERSHED SCIENCE, ADDRESSES THE BASIC PHYSICAL AND MATHEMATICAL CONCEPTS OF GROUND-WATER HYDROLOGY AND HYDRAULICS. PRESENTATION OF THE SUBJECT MATTER BEGINS WITH AN OVERVIEW OF GROUND-WATER HYDROLOGY AND THE ROLE OF GROUND-WATER IN THE HYDROLOGIC CYCLE. THEN FOLLOWS DISCUSSION OF WATER STORAGE AND WATER BUDGETS, FLUID FLOW THROUGH POROUS MEDIA, STEADY AND UNSTEADY FLOW, AND FINITE DIFFERENCE TECHNIQUES. WORKED EXAMPLES AND PROBLEM SETS AT THE END OF EACH CHAPTER ARE INCLUDED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $20.00

IRIS ACCESSION NUMBER: EW004400

PUBLICATION DATE: 71

TITLE: RIVER MECHANICS-VOLUME I 8 II.

PERSONAL AUTHOR: SHEN, HSIEH WEN (EDITOR).

DESCRIPTOR: ENGINEERING; EROSION CONTROL; HYDROLOGY; *INSTRUCTIONAL MATERIALS; INSTRUMENTATION; MANAGEMENT; MEASUREMENT; *MECHANICS (PHYSICS); MODELS; RESEARCH; *RIVERS; *SEDIMENTATION; *WATER RESOURCES; *WATERSHEDS

DESCRIPTIVE NOTE: 1322P.

ABSTRACT: BASED ON LECTURE NOTES DELIVERED AT THE INSTITUTE ON RIVER MECHANICS IN 1970, THIS TWO-VOLUME DOCUMENT PRESENTS A COMPREHENSIVE COLLECTION OF INFORMATION RELATED TO RIVER MECHANICS AND VARIOUS ASPECTS OF ALLUVIAL RIVER PROBLEMS. RESEARCH AND ENGINEERING ASPECTS OF EACH SUBJECT AREA ARE EMPHASIZED. DISCUSSED IN VOLUME I ARE FLOW AND SEDIMENT PROPERTIES, LOAD, AND INSTRUMENTATION AND MEASUREMENT. INCLUDED IN VOLUME II ARE DISCUSSIONS OF RIVER MORPHOLOGY, MODELING, SCOUR AND EROSION CONTROL, SOIL EROSION AND EROSION CONTROL STRUCTURES, AND RESEARCH NEEDS.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $30.00 FOR BOTH VOLUMES.

IRIS ACCESSION NUMBER: EW004401

PUBLICATION DATE: 76

TITLE: JOINT TREATMENT OF INDUSTRIAL AND MUNICIPAL WASTEWATERS.

DESCRIPTOR: ADMINISTRATION; *COOPERATIVE PROGRAMS; *DECISION MAKING; ECONOMICS; *FACILITIES; *INDUSTRY; MANAGEMENT; *MUNICIPALITIES; *OPERATIONS (WASTEWATER); STANDARDS; UTILITIES; *WASTE DISPOSAL; *WASTEWATER TREATMENT; WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 34P.

ABSTRACT: PRESENTED IS A MANUAL FOCUSING ON THE JOINT TREATMENT OF INDUSTRIAL AND MUNICIPAL WASTEWATER FROM THE PERSPECTIVE OF INDUSTRIAL MANAGEMENT. DESIGNED TO ASSIST INDUSTRIAL PLANT MANAGEMENT IN DECIDING HOW TO MEET WASTEWATER EFFLUENT REQUIREMENTS, THE DOCUMENT PRESENTS A COURSE OF ACTION FOR MANAGEMENT TO FOLLOW IN DECIDING WHETHER A TREATMENT APPROACH IS APPLICABLE AT A PARTICULAR PLANT. INCLUDED IN THE DISCUSSION ARE WAYS OF DEFINING THE WASTEWATER PROBLEM, INDUSTRIAL WASTEWATER RECLAMATION AND RECYCLING, THE FEASIBILITY OF JOINT TREATMENT, ADMINISTRATIVE ASPECTS OF JOINT TREATMENT, AND THE MONITORING OF INDUSTRIAL EFFLUENT BEING DISCHARGED TO THE JOINT TREATMENT PLANT. THE APPENDIX IDENTIFIES SOME FEDERAL REGULATIONS AND GUIDELINES PERTINENT TO JOINT TREATMENT OF MUNICIPAL AND INDUSTRIAL WASTEWATERS, CONSTRUCTION GRANTS, AND INDUSTRIAL COST RECOVERY.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVE., NW, WASHINGTON, DC 20037 PRICE: $2.00

INSTITUTION NAME: TECHNICAL PRACTICE COMMITTEE.

IRIS ACCESSION NUMBER: EW004402

PUBLICATION DATE: 78

TITLE: INSTRUMENTATION IN WASTEWATER TREATMENT PLANTS.

DESCRIPTOR: *DESIGN; *FACILITIES; *INSTRUCTIONAL MATERIALS; *INSTRUMENTATION; MANUALS; MEASUREMENT; OPERATIONS (WASTEWATER); *TECHNOLOGY; UTILITIES; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; WATER QUALITY.

DESCRIPTIVE NOTE: 108P.

ABSTRACT: PRESENTED IS A MANUAL FOR PLANT OPERATORS, DESIGN ENGINEERS, AND MAINTENANCE PERSONNEL ON THE DESIGN OF INSTRUMENTATION USED IN WASTEWATER TREATMENT PLANTS. INCLUDED IN THE DISCUSSION ARE CONTROL SYSTEMS AND TYPES OF CONTROL, DESIGN CRITERIA, SENSING AND SAMPLING DEVICES, TRANSMISSION SYSTEMS, READOUT, COMPUTERS, AND APPLICATIONS. BENEFITS THAT CAN BE DERIVED FROM THE PROPER APPLICATION OF INSTRUMENTATION AND CONTROL ARE ENUMERATED.

AVAILABILITY: WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVENUE, N.W., WASHINGTON, D.C. 20037 PRICE $12.00

IRIS ACCESSION NUMBER: EW004406

PUBLICATION DATE: 79

TITLE: ION CHROMATOGRAPHIC ANALYSIS OF ENVIRONMENTAL POLLUTANTS. VOLUME I.

PERSONAL AUTHOR: SAWICKI, E.; AND OTHERS.

DESCRIPTOR: *AIR POLLUTION CONTROL; *ANALYTICAL TECHNIQUES; *CHEMICAL ANALYSIS; *CHROMATOGRAPHY; *ENVIRONMENTAL RESEARCH; INDUSTRY; *INSTRUMENTATION; *LABORATORY TECHNIQUES; MEASUREMENT; *MEASUREMENT TECHNIQUES; SAMPLING; *SYMPOSIA; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 210P.

ABSTRACT: COMPILED ARE 15 PAPERS PRESENTED IN THE FIRST NATIONAL SYMPOSIUM ON ION CHROMATOGRAPHIC ANALYSIS OF ENVIRONMENTAL POLLUTANTS. DISCUSSED ARE APPROACHES FOR THE USE OF THE ION CHROMATOGRAPH FOR THE ANALYSIS OF A WIDE VARIETY OF ANIONS, CATIONS, AND THEIR PRECURSORS IN THE ENVIRONMENT AND IN BIOLOGICAL MIXTURES. INFORMATION IS PROVIDED ON SAMPLE COLLECTION AND PREPARATION, METHODOLOGY, RESULTS, AND COMPARISON TO OTHER METHODS.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 PRICE: $28.00

IRIS ACCESSION NUMBER: EW004407

PUBLICATION DATE: 79

TITLE: ION CHROMATOGRAPHIC ANALYSIS OF ENVIRONMENTAL POLLUTANTS-VOLUME 2.

PERSONAL AUTHOR: MULIK, J. D.; SAWICKI, E.

DESCRIPTOR: AIR POLLUTION CONTROL; *ANALYTICAL TECHNIQUES; *CHEMICAL ANALYSIS; *CHROMATOGRAPHY; *ENVIRONMENTAL RESEARCH; INDUSTRY; *INSTRUMENTATION; *LABORATORY TECHNIQUES; MEASUREMENT; MEASUREMENT TECHNIQUES; *SAMPLING; *SYMPOSIA; *TOXICOLOGY; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 434P.

ABSTRACT: COMPILED ARE 33 PAPERS PRESENTED IN THE SECOND NATIONAL SYMPOSIUM ON ION CHROMATOGRAPHIC ANALYSIS OF ENVIRONMENTAL POLLUTANTS. CONSIDERED IN THE SYMPOSIUM WERE RECENT ADVANCES IN KNOWLEDGE OF THE GENOTOXIC PROPERTIES OF THE ANIONS, CATIONS, AND PRECURSERS THAT CAN READILY BE ANALYZED BY ION CHROMATOGRAPHY. INFORMATION IS PROVIDED ON SAMPLE COLLECTION AND PREPARATION, METHODOLOGY, RESULTS, AND COMPARISON TO OTHER METHODS.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 PRICE $28.00

IRIS ACCESSION NUMBER: EW004408

PUBLICATION DATE: 72

TITLE: STOCHASTIC PROCESSES IN HYDROLOGY.

PERSONAL AUTHOR: YEVJEVICH, VUJICA.

DESCRIPTOR: COMPUTERS; ENGINEERS; *HIGHER EDUCATION; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; *MEASUREMENT; *POST SECONDARY EDUCATION; REFERENCE MATERIALS; *STATISTICS; *STOCHASTIC METHODS; WATER RESOURCES

DESCRIPTIVE NOTE: 276P.

ABSTRACT: THIS TEXT, PRESENTS THE VARIOUS METHODS OF ANALYZING STOCHASTIC PROCESSES IN HYDROLOGY GOVERNED BY THE LAWS OF CHANCE. EMPHASIZED ARE METHODS FOR INVESTIGATING STOCHASTIC PROCESSES RATHER THAN THE STUDY OF VARIOUS TYPES OF PROCESSES. A BASIC KNOWLEDGE OF PROBABILITY THEORY AND MATHEMATICAL STATISTICS IS PRESUMED. PROBLEMS TO SOLVE AND DISCUSS ARE PRESENTED AT THE END OF EACH CHAPTER. A LIMITED NUMBER OF REFERENCES ARE INCLUDED.

AVAILABILITY: WATER RESOURCES PUBLICATIONS, PO BOX 2841, LITTLETON, COLORADO 80151 PRICE: $19.00

IRIS ACCESSION NUMBER: EW004409

PUBLICATION DATE: 76

TITLE: POLLUTION ENGINEERING PRACTICE HANDBOOK.

PERSONAL AUTHOR: CHEREMISINOFF, P. E.; YOUNG, RICHARD A.

DESCRIPTOR: *AIR POLLUTION CONTROL; ECONOMICS; ENGINEERING; ENVIRONMENT; *EQUIPMENT; *INFORMATION SOURCES; INSTRUMENTATION; MANAGEMENT; *MEASUREMENT; NOISE POLLUTION; POLLUTION; *RADIOACTIVITY; *SOLID WASTES; *TECHNOLOGY; WASTES; WASTEWATER; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 1073P.

ABSTRACT: DESCRIBED IN THIS HANDBOOK ARE THE METHODS AND EQUIPMENT TO CONTROL POLLUTION IN ITS MANY FORMS-AIR, WATER, NOISE, SOLID WASTE, AND RADIOACTIVITY. STRESSED IS THE MOST ECONOMICAL AND EFFICIENT SOLUTION TO THE EMISSION OF ENVIRONMENTAL POLLUTANTS. TECHNICALLY AND ECONOMICALLY FEASIBLE TECHNIQUES, METHODS, EQUIPMENT AND SYSTEMS ARE ASSESSED. THE VOLUME IS ORGANIZED BY PROBLEM TYPE. PRACTICAL RATHER THAN THEORETICAL APPROACHES TO ALL PROBLEMS ARE STRESSED. THE CASE HISTORY METHOD IS UTILIZED. 408 FIGURES AND 126 TABLES AUGMENT THE INFORMATION PROVIDED.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 PRICE: $32.50

IRIS ACCESSION NUMBER: EW004410
PUBLICATION DATE: 79

TITLE: DESIGN OF LAND TREATMENT SYSTEMS FOR INDUSTRIAL WASTES--THEORY AND PRACTICE.

PERSONAL AUTHOR: OVERCASH, MICHAEL RAY; PAL, DHIRAJ

DESCRIPTOR: CHEMICAL ANALYSIS; COST EFFECTIVENESS; *DESIGN; ENVIRONMENTAL INFLUENCES; *ENGINEERING; *GUIDELINES; HYDRAULICS; INDUSTRY; *INDUSTRIAL WASTES; *LAND USE; *LAND APPLICATION; SOILS; *TECHNOLOGY; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 684P.

ABSTRACT: PRESENTED IN THIS BOOK IS THE TECHNICAL AND ENGINEERING BASIS FOR THE DESIGN OF LAND TREATMENT SYSTEMS BY MEANS OF A UNIFIED APPROACH. TOPICS DISCUSSED INCLUDE: FUNDAMENTAL DESIGN BASIS; TOTAL DESIGN PROCEDURES; CATEGORIES OF WASTES; PRETREATMENT OR IN-PLANT SOURCE CONTROL; ECONOMIC ANALYSES; AND EXAMPLE SYSTEMS.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 (PRICE: $35.00)

IRIS ACCESSION NUMBER: EW004411
PUBLICATION DATE: 79

TITLE: ANALYSIS OF FLOW IN PIPE NETWORKS.

PERSONAL AUTHOR: JEPPSON, ROLAND W.

DESCRIPTOR: *COMPUTER PROGRAMS; *DISTRIBUTION SYSTEMS; *ENGINEERING; ENVIRONMENTAL INFLUENCES; *HYDRAULICS; MUNICIPALITIES; *NETWORK ANALYSIS; *PIPES; PUMPS; TECHNOLOGY; UTILITIES; *WATER SUPPLY

DESCRIPTIVE NOTE: 164P.

ABSTRACT: THIS BOOK DISCUSSES THE USE OF VARIOUS DIGITAL COMPUTER METHODS FOR LARGE PIPE NETWORK ANALYSIS. FUNDAMENTAL PRINCIPLES OF HYDRAULICS AND THE FOUNDATION OF NETWORK ANALYSIS WITH APPLICATION TO PRESSURE CONDUIT FLOW ARE PRESENTED IN THE FIRST CHAPTERS. THE TEXT THEN ADDRESSES THE SYSTEMS OF EQUATIONS IN USE AND METHODS FOR SOLVING THESE SYSTEMS OF NONLINEAR EQUATIONS. SHORT VERSIONS OF COMPUTER PROGRAMS ARE GIVEN TO ILLUSTRATE SOLUTIONS BY VARIOUS METHODS OF ANALYSES.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 (PRICE: $15.00)

IRIS ACCESSION NUMBER: EW004412

PUBLICATION DATE: 79

TITLE: CONTROL OF SPECIFIC (TOXIC) SUBSTANCES.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CHEMICAL ANALYSIS; *CONFERENCES; CONTROL PROCESSES; ENGINEERING; INDUSTRY; *INSTRUMENTATION; *MEASUREMENT; METALS; *HAZARDOUS MATERIALS; ORGANIC CHEMISTRY; PRETREATMENT; POLLUTION CONTROL; REGULATION; TECHNOLOGY; *TOXIC SUBSTANCES; *WASTES; *WASTEWATER TREATMENT ; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 514P.

ABSTRACT: PRESENTED ARE THE PROCEEDINGS AND 37 TECHNICAL PAPERS, FROM A 1979 SPECIALTY CONFERENCE ON THE CONTROL OF SPECIFIC (TOXIC) POLLUTANTS JOINTLY SPONSORED BY THE AIR POLLUTION CONTROL ASSOCIATION AND THE WATER POLLUTION CONTROL FEDERATION. THE PAPERS ARE PUBLISHED AS THEY WERE PRESENTED. SESSION TOPICS INCLUDE: MEASUREMENT METHODS FOR SPECIFIC POLLUTANTS, REAL WORLD APPLICATIONS AND PROBLEMS IN MEASUREMENT, EVALUATING THE HAZARDS OF SPECIFIC POLLUTANTS, CONTROL PROCESSES FOR SPECIFIC POLLUTANTS IN AIR, PRETREATMENT FOR SPECIFIC POLLUTANTS, CONTROL OF SPECIFIC POLLUTANTS IN AIR, AND CONTROL OF SPECIFIC POLLUTANTS IN INDUSTRIAL WASTEWATERS.

AVAILABILITY: AIR POLLUTION CONTROL FEDERATION, FLORIDA SECTION, PRICE $18.75

IRIS ACCESSION NUMBER: EW004413
PUBLICATION DATE: 79

TITLE: LAGOON INFORMATION SOURCE BOOK.

PERSONAL AUTHOR: MIDDLEBROOKS, E. JOE; AND OTHERS.

DESCRIPTOR: BIOCHEMISTRY; *CONSTRUCTION; ENVIRONMENTAL INFLUENCES; ENGINEERING; *LAGOONS; LAND USE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *STABILIZATION PONDS; *WASTEWATER TREATMENT; WATER POLLUTION CONTROL; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 215P.

ABSTRACT: THIS BOOK ADDRESSES THE CONSTRUCTION, OPERATION, MAINTENANCE, AND PERFORMANCE OF WASTEWATER STABILIZATION LAGOONS. SECTION I PROVIDES A BRIEF REVIEW OF THE MAJOR COMPONENTS AND CHARACTERISTICS OF THIS TREATMENT PROCESS. SECTION II CONTAINS THE ABSTRACTS OF ARTICLES, REPORTS, AND BOOKS WHICH HAVE DISCUSSED LAGOON SYSTEMS OVER MANY YEARS. THE ABSTRACTS ARE ALPHABETIZED BY AUTHOR AND AN EXTENSIVE INDEX BY SUBJECT AREA IS PRESENTED.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, PO BOX 1425, ANN ARBOR, MI 48106 PRICE: $20.00

IRIS ACCESSION NUMBER: EW004416

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: AIR PROGRAMS.

DESCRIPTOR: *AIR POLLUTION CONTROL; *AIR POLLUTION; *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING

DESCRIPTIVE NOTE: 34P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO AIR POLLUTION. THE LISTING INCLUDES A TOTAL OF 34 PROGRAMS FROM 22 STATES WHICH EACH INVOLVE AT LEAST 3 AIR POLLUTION CONTROL RELATED COURSES WITHIN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON AIR POLLUTION CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE $3.50 PER COPY/SET OF 12-$55.00

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004417
PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: NOISE PROGRAMS.

DESCRIPTOR: ACOUSTICS; *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *NOISE POLLUTION; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING

DESCRIPTIVE NOTE: 24P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO NOISE POLLUTION. THE LISTING INCLUDES A TOTAL OF 16 PROGRAMS FROM 13 STATES. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON NOISE POLLUTION CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240, PRICE: $3.50 PER COPY/$55.00 FOR SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004418
PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: PESTICIDES AND TOXICOLOGY PROGRAMS.

DESCRIPTOR: *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *PESTICIDES; POLLUTION; *POST SECONDARY EDUCATION; PUBLIC HEALTH; *PROGRAM DESCRIPTIONS; *TRAINING; *TOXICOLOGY

DESCRIPTIVE NOTE: 96P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO PESTICIDES AND TOXICOLOGY. THE LISTING INCLUDES A TOTAL OF 135 PROGRAMS FROM 44 STATES, WHICH EACH INVOLVE AT LEAST 5 PESTICIDE AND TOXICOLOGY RELATED COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON THESE FORMS OF POLLUTION CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE $6.50 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004419
PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: POTABLE WATER PROGRAMS.

DESCRIPTOR: *DRINKING WATER; *ENVIRONMENTAL RESEARCH; *EDUCATION PROGRAMS; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING; *UTILITIES; *WATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 36P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO POTABLE WATER. THE LISTING INCLUDES A TOTAL OF 41 PROGRAMS FROM 19 STATES, WHICH EACH INVOLVE AT LEAST 3 POTABLE WATER COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON POTABLE WATER CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE: $3.50 PER COPY/$55.00 FOR A SET OF 12

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004420

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: WASTE-WATER PROGRAMS.

DESCRIPTOR: *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *OPERATIONS (WASTEWATER); *POSTSECONDARY EDUCATION; POLLUTION; *PROGRAM DESCRIPTIONS; *TRAINING; *WASTEWATER TREATMENT; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 29P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO WASTEWATER. THE LISTING INCLUDES A TOTAL OF 28 PROGRAMS FROM 16 STATES, WHICH EACH INVOLVE AT LEAST 3 WASTEWATER COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON WASTEWATER CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE $3.50 PER COPY/$55.00 FOR A

SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004421

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: WATER/WASTEWATER PROGRAMS.

DESCRIPTOR: *DRINKING WATER; *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING; *UTILITIES; *WATER TREATMENT; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 123P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE CLASSIFIED AS INTERSECTING BOTH ENVIRONMENTAL AREAS OF POTABLE WATER AND WASTEWATER. THE LISTING INCLUDES A TOTAL OF 183 PROGRAMS FROM 46 STATES AND ONE TERRITORY, WHICH EACH INVOLVE AT LEAST 3 WATER AND/OR WASTEWATER COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT THE WAY THAT FURTHER INFORMATION ON POTABLE AND WASTEWATER CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52440 PRICE $6.50 PER COPY/$55.00 FOR A SET OF 12

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004422

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: RADIATION PROGRAMS.

DESCRIPTOR: ENERGY; *ENVIRONMENT; ENVIRONMENTAL EDUCATION; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *RADIATION; *TRAINING

DESCRIPTIVE NOTE: 35P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO RADIATION. THE LISTING INCLUDES A TOTAL OF 39 PROGRAMS FROM 23 STATES AND ONE TERRITORY, WHICH EACH INVOLVE AT LEAST THREE RADIATION COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON RADIATION CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE: $3.50 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004423

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: SOLID WASTE PROGRAMS.

DESCRIPTOR: ENERGY; *ENVIRONMENT; *EDUCATIONAL PROGRAMS; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *RECYCLING; *SOLID WASTES; *TRAINING; *WASTES

DESCRIPTIVE NOTE: 19P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO SOLID WASTES. THE LISTING INCLUDES A TOTAL OF 9 PROGRAMS FROM SEVEN STATES, WHICH EACH INVOLVE AT LEAST TWO SOLID WASTE COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON SOLID WASTE CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE: $3.50 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004424

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: ENERGY PROGRAMS.

DESCRIPTOR: *ENERGY; *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING

DESCRIPTIVE NOTE: 107P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE

NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO ENERGY. THE LISTING INCLUDES A TOTAL OF 159 PROGRAMS FROM 41 STATES AND ONE TERRITORY, WHICH EACH INVOLVE AT LEAST FIVE ENERGY COURSES IN THEIR REQUIREMENTS. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON ENERGY CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE $6.50 PER COPY/$55.00 PER SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004425

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: COMPOSITE: ENVIRONMENTAL ENGINEERING/TECHNOLOGY.

DESCRIPTOR: *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *ENGINEERING EDUCATION; *ENGINEERING; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING; *TECHNOLOGY

DESCRIPTIVE NOTE: 117P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO ENVIRONMENTAL ENGINEERING/TECHNOLOGY. THE LISTING INCLUDES A TOTAL OF 175 PROGRAMS FROM 39 STATES AND ONE TERRITORY. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON ENVIRONMENTAL ENGINEERING/TECHNOLOGY CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE $6.50 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004426

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: COMPOSITE: ENVIRONMENTAL SCIENCE/HEALTH.

DESCRIPTOR: ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *ENVIRONMENTAL SCIENCES; *ENVIRONMENT; *HEALTH; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *SCIENCES; TRAINING

DESCRIPTIVE NOTE: 134P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO ENVIRONMENTAL SCIENCE/HEALTH. THE LISTING INCLUDES A TOTAL OF 205 PROGRAMS FROM 43 STATES, ONE TERRITORY AND THE DISTRICT OF COLUMBIA. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON ENVIRONMENTAL ENGINEERING/TECHNOLOGY CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE: $6.50 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004427

PUBLICATION DATE: 79

TITLE: POST-SECONDARY ENVIRONMENTAL EDUCATION: COMPOSITE: ENVIRONMENTAL STUDIES.

DESCRIPTOR: *ENVIRONMENTAL RESEARCH; *EDUCATIONAL PROGRAMS; *ENVIRONMENTAL EDUCATION; *ENVIRONMENT; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; *TRAINING

DESCRIPTIVE NOTE: 203P.

ABSTRACT: THIS PUBLICATION IS PART OF A 12 VOLUME DIRECTORY RESULTING FROM PHASE III OF THE NATIONAL ENVIRONEMTNAL ENERGY WORKFORCE WHICH WAS CONDUCTED BY THE NATIONAL FIELD RESEARCH CENTRE INC., UNDER THE GUIDANCE OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS VOLUME INCLUDES ALL IDENTIFIED ENVIRONMENTAL/ENERGY POST-SECONDARY EDUCATION AND/OR TRAINING PROGRAMS WHICH ARE SPECIFICALLY RELATED TO ENVIRONMENTAL STUDIES. THE LISTING INCLUDES A TOTAL OF 336 PROGRAMS FROM 47 STATES AND ONE TERRITORY. THE PRIMARY PURPOSE IS TO POINT OUT THE WAY THAT FURTHER INFORMATION ON ENVIRONMENTAL STUDIES CAN BE OBTAINED.

AVAILABILITY: GRAPHIC PRINTING/NATIONAL COPY CENTER, PO BOX 986, IOWA CITY, IA 52240 PRICE: $10.00 PER COPY/$55.00 FOR A SET OF 12.

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER, INC.

IRIS ACCESSION NUMBER: EW004428

PUBLICATION DATE: 70

TITLE: IDAHO WATER SYSTEMS: OPERATORS-READING ASSIGNMENTS AND EXERCISES-CLASS I AND II AND CLASS III AND IV.

PERSONAL AUTHOR: WALLACE, A.T.

DESCRIPTOR: *AUTOINSTRUCTIONAL AIDS; *CERTIFICATION; *INSTRUCTIONAL MATERIALS; MATHEMATICS; *IDAHO; *OPERATORS (WATER); *POST SECONDARY EDUCATION; READING ASSIGNMENTS; STATE PROGRAMS; TECHNOLOGY; *TRAINING PROGRAMS; *WATER TREATMENT; *WATER RESOURCES; WATER QUALITY

DESCRIPTIVE NOTE: 80P.

ABSTRACT: PRESENTED ARE THE READING ASSIGNMENTS AND EXERCISES FOR A COURSE TO PREPARE IDAHO CLASS I-IV WATER SYSTEM OPERATORS FOR THE STATE CERTIFICATION EXAMINATION. UTILIZED IS THE PROGRAMMED LEARNING INSTRUCTIONAL METHOD. ADDRESSED IN PART I ARE MATHEMATICS, CHEMISTRY, AND WATER TREATMENT TECHNOLOGY. PART II INCLUDES EXERCISES ON MATHEMATICS, CHEMISTRY, HYDRAULICS AND ELECTRICTIY, WATER SOURCES, WATER QUALITY, COAGULATION AND SEDIMENTATION, SAND FILTRATION, DISINFECTION, MISCELLANEOUS CHEMICAL TREATMENT, TASTE AND ODOR CONTROL, CORROSION, THE LABORATORY EXAMINATION, AND MANAGEMENT.

AVAILABILITY: IDAHO DEPT OF HEALTH 8 WELFARE, DIVISION OF ENVIRONMENT, STATEHOUSE, BOISE, IDAHO 83720 PRICE: $1.00.

IRIS ACCESSION NUMBER: EW004429

PUBLICATION DATE: 79

TITLE: PACKAGE SEWAGE TREATMENT: STILL AN OPTION FOR GROWING AREAS.

DESCRIPTOR: *WASTEWATER TREATMENT; WATER POLLUTION CONTROL; ENVIRONMENTAL INFLUENCES; *OPERATIONS (WASTEWATER); *PACKAGE PLANTS (WASTEWATER); *EQUIPMENT; MUNICIPALITIES; *ECONOMICS; *FACILITIES

DESCRIPTIVE NOTE: 65-67P.

ABSTRACT: THIS ARTICLE DISCUSSES THE CHANGING USE IN PREFABRICATED WASTEWATER TREATMENT UNITS. VARIOUS CASE STUDIES AND DEMONSTRATION PROJECTS ARE PRESENTED TO ILLUSTRATE COST, LABOR, AND EFFLUENT COMPARISONS.

AVAILABILITY: AMERICAN CITY AND COUNTY: V94 N11 P65-67 NOVEMBER 1979.

IRIS ACCESSION NUMBER: EW004430

PUBLICATION DATE: 79

TITLE: BASIS FOR DESIGN OF INDUSTRIAL WASTEWATER TREATMENT PLANTS.

PERSONAL AUTHOR: GLOYNA, EARNEST F.; FORD, DAVIS L.

DESCRIPTOR: *WASTEWATER TREATMENT; FACILITY GUIDELINES; WATER POLLUTION CONTROL; *OPERATIONS (WASTEWATER); *PETROCHEMICALS; *INDUSTRY; ENGINEERING; ENVIRONMENTAL INFLUENCES; *COST EFFECTIVENESS; *CHEMICAL ANALYSIS; *WASTE DISPOSAL; REFINERIES

DESCRIPTIVE NOTE: 2577-2587P.

ABSTRACT: THIS PAPER DESCRIBES THE METHODS OF CHARACTERIZING AND TREATING WASTEWATERS PRODUCED AT PETROLEUM REFINING FACILITIES. SEVERAL BIOLOGICAL TREATMENT CRITERIA, EFFLUENT POLISHING PROCESSES, AND NONBIOLOGICAL TREATMENT PROCESSES ARE DISCUSSED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004431

PUBLICATION DATE: 79

TITLE: HEALTH RISKS ASSOCIATED WITH LAND APPLICATION OF MUNICIPAL SLUDGE.

PERSONAL AUTHOR: PAHREN, HERBERT R.; AND OTHERS.

DESCRIPTOR: *WASTE DISPOSAL; *LAND USE; *PUBLIC HEALTH; MUNICIPALITIES; *HEAVY METALS; *SLUDGE; PATHOGENS; ENVIRONMENTAL INFLUENCES; WATER POLLUTION CONTROL; WASTEWATER TREATMENT; CHEMICAL ANALYSIS; AGRICULTURAL PRODUCTION; *LAND APPLICATION.

DESCRIPTIVE NOTE: 2588-2601P.

ABSTRACT: THIS ARTICLE DISCUSSES SOME OF THE POTENTIAL PROBLEMS ASSOCIATED WITH THE LAND APPLICATION OF MUNICIPAL SLUDGES. IN PARTICULAR, THE ACTION OF TRACE METALS PASSING THROUGH THE FOOD CHAIN AND THE PRESENCE OF PARASITES AND ASSOCIATED HEALTH RISKS ARE PRESENTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004432

PUBLICATION DATE: 79

TITLE: INDUSTRIAL WASTE SURCHARGE PROGRAM IN LOS ANGELES COUNTY.

PERSONAL AUTHOR: KREMER, JAY G.; AND OTHERS.

DESCRIPTOR: *WASTEWATER TREATMENT; *COST EFFECTIVENESS; *MUNICIPALITIES; INDUSTRY; *SURCHARGES; *CALIFORNIA; UTILITIES; OPERATIONS (WASTEWATER); *MANAGEMENT; ECONOMICS; *USER CHARGES.

DESCRIPTIVE NOTE: 2626-2635P.

ABSTRACT: THIS ARTICLE DISCUSSES THE EFFECTS OF AN INDUSTRIAL USER CHARGE ON THE COMPANY, THE SEWERAGE AGENCY AND THE LOCAL COMMUNITY. THE LOS ANGELES DISTRICT'S USER CHARGE FORMULA IS DESCRIBED AND THE PROCEDURES GIVEN FOR THE ANNUAL CALCULATION OF THE UNIT CHARGE RATES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;

V51 N11.

IRIS ACCESSION NUMBER: EW004433

PUBLICATION DATE: 79

TITLE: LOW-LEVEL CHLORINE ANALYSIS BY AMPEROMETRIC TITRATION.

PERSONAL AUTHOR: BROOKS, ARTHUR S.; SEEGERT, GREGORY L.

DESCRIPTOR: *CHEMICAL ANALYSIS; *LABORATORY PROCEDURES; WATER QUALITY; MEASUREMENT; *CHLORINE; *ANALYTICAL TECHNIQUES; *TITRATION.

DESCRIPTIVE NOTE: 2636-2640P.

ABSTRACT: THIS REPORT DESCRIBES AN AMPEROMETRIC TITRATION PROCEDURE FOR MEASURING LOW RESIDUAL CHLORINE CONCENTRATIONS IN FRESH WATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004434

PUBLICATION DATE: 79

TITLE: EFFECT OF DISK ROTATIONAL SPEED ON BIOLOGICAL CONTRACTOR EFFICIENCY.

PERSONAL AUTHOR: FRIEDMAN, A. A.; AND OTHERS.

DESCRIPTOR: *WASTEWATER TREATMENT; *EQUIPMENT; WATER POLLUTION CONTROL; ENGINEERING; *ROTATING BIOLOGICAL CONTACTORS; PUMPS; *OPERATIONS (WASTEWATER); *RESEARCH; COST EFFECTIVENESS; CHEMICAL ANALYSIS; *EVALUATION.

DESCRIPTIVE NOTE: 2678-2690P.

ABSTRACT: THIS ARTICLE DISCUSSES THE RESULTS OF EXPERIMENTS CONDUCTED TO EVALUATE ROTATING BIOLOGICAL CONTACTOR (RBC) PERFORMANCE AS A FUNCTION OF ROTATIONAL SPEED UNDER CAREFULLY CONTROLLED CONDITIONS. IMPLICATIONS FOR PLANT DESIGN ARE PROVIDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004435

PUBLICATION DATE: 79

TITLE: DYNAMIC PROCESS MODELING OF WASTEWATER STABILIZATION PONDS.

PERSONAL AUTHOR: FRITZ, JACK J.; AND OTHERS.

DESCRIPTOR: CHEMICAL ANALYSIS; ENVIRONMENTAL INFLUENCES; *WASTEWATER TREATMENT; LAND USE; *STABILIZATION PONDS; MATHEMATICS; *RESEARCH; *MODELS

DESCRIPTIVE NOTE: 2724-2743P.

ABSTRACT: THIS ARTICLE REPORTS A STUDY UNDERTAKEN TO DEVELOP A COMPREHENSIVE, NON-STEADY STATE PROCESS MODEL OF FACULTATIVE STABILIZATION PONDS USING THE PRINCIPLE OF CONSERVATION OF MASS. APPLICATIONS OF THE MODEL ARE OUTLINED AND CONCLUSIONS STATED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004436

PUBLICATION DATE: 79

TITLE: INITIAL TESTING OF A RECENT BIOLOGICAL MONITORING CONCEPT.

PERSONAL AUTHOR: GRUBER, DAVID; AND OTHERS.

DESCRIPTOR: WATER QUALITY; *WATER POLLUTION CONTROL; *TECHNOLOGY; *RESEARCH; *BIOLOGICAL MONITORING; *FISH; *ENVIRONMENTAL INFLUENCES; EQUIPMENT; CHEMICAL ANALYSIS; LABORATORY PROCEDURES; *MONITORING; *INDUSTRY; *EFFLUENTS

DESCRIPTIVE NOTE: 2744-2751P.

ABSTRACT: THIS ARTICLE DISCUSSES RESEARCH UNDERTAKEN TO DETERMINE MONITORING FOR CONTINUOUSLY ASSESSING INDUSTRIAL EFFLUENTS. THE PROCEDURE, MATERIALS, RESULTS, AND CONCLUSIONS ARE PRESENTED WITH SUGGESTIONS FOR APPLICABILITY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N11.

IRIS ACCESSION NUMBER: EW004437

PUBLICATION DATE: 79

TITLE: APPLYING OXIDATION AND ADSORPTION TECHNIQUES: A SUMMARY OF PROGRESS.

PERSONAL AUTHOR: SONTHEIMER, HEINRICH.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; *TECHNOLOGY; RESEARCH; *DRINKING WATER; *OPERATIONS (WATER) *ADSORPTION; ENVIRONMENTAL INFLUENCES; CHEMICAL ANALYSIS; COST EFFECTIVENESS; *WATER SUPPLY; *OXIDATION.

DESCRIPTIVE NOTE: 612-617P.

ABSTRACT: THIS ARTICLE PRESENTS AN OVERVIEW OF THE RESULTS OF INTERNATIONAL STUDIES ON THE STATE OF THE ART OF OXIDATION AND ADSORPTION TREATMENT OF POTABLE WATER. THE USE OF STANDARD TREATMENT, BIOLOGICAL TREATMENT, ACTIVATED

CARBON, AND OTHER TREATMENT PROCESSES ARE DISCUSSED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004438

PUBLICATION DATE: 79

TITLE: DESIGN CRITERIA AND PROCESS SCHEMES FOR GAC FILTERS.

PERSONAL AUTHOR: SONTHEIMER, HEINRICH.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; PUBLIC HEALTH; *TECHNOLOGY; *EUROPE; DRINKING WATER; *ACTIVATED CARBON; *OPERATIONS (WATER); ENVIRONMENTAL INFLUENCES; CHEMICAL ANALYSIS; ECONOMICS

DESCRIPTIVE NOTE: 618-622P.

ABSTRACT: THIS PAPER DESCRIBES THE HISTORICAL DEVELOPMENT AND THE RESULTING DESIGN CRITERIA AND PROCESS SCHEMES FOR USING GRANULAR ACTIVATED CARBON (GAC) FILTERS IN GERMANY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004439

PUBLICATION DATE: NOV 79

TITLE: OBJECTIVES AND PROCEDURES FOR GAC TREATMENT.

PERSONAL AUTHOR: MEIJERS, ADRIAAN P.; AND OTHERS.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; ENVIRONMENTAL INFLUENCES; PUBLIC HEALTH; *EUROPE; *ACTIVATIED CARBON; DRINKING WATER; *OPERATIONS (WATER); *TECHNOLOGY; CHEMICAL ANALYSIS; *RESEARCH

DESCRIPTIVE NOTE: 628-637P.

ABSTRACT: DESCRIBED ARE SEVERAL OPERATING CARBON FILTERS INSTALLATION AND PILOT PLANTS IN THE NETHERLANDS. CRITERIA FOR CONTACT TIME AND RUN LENGTHS BETWEEN REGENERATIONS ARE DISCUSSED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004440

PUBLICATION DATE: 79

TITLE: THE USE OF GAC FILTRATION TO ENSURE QUALITY IN DRINKING WATER FROM SURFACE SOURCES.

PERSONAL AUTHOR: SCHALEKAMP, MAARTEN.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; *ECONOMICS; ENVIRONMENTAL INFLUENCES; *EUROPE; *ACTIVATED CARBON; DRINKING WATER; *OPERATIONS (WATER); PUBLIC HEALTH; *RESEARCH; EQUIPMENT; WATER SUPPLY; CHEMICAL ANALYSIS

DESCRIPTIVE NOTE: 638-647P.

ABSTRACT: THIS ARTICLE DISCUSSES THE USE OF GRANULAR ACTIVATED CARBON IN THE TREATMENT OF WATER IN SWITZERLAND. EMPHASIS IS PLACED ON COST FACTORS AND REACTIVATION OF THE CARBON.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004441

PUBLICATION DATE: 79

TITLE: AN EVOLUTIONARY APPROACH TO ACTIVATED CARBON TREATMENT.

PERSONAL AUTHOR: SCHULHOF, PIERRE.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; PUBLIC HEALTH; ENVIRONMENTAL INFLUENCES; *EUROPE; *ACTIVATED CARBON; DRINKING WATER; *OPERATIONS (WATER); *TECHNOLOGY; RESEARCH; *FILTRATION; *OZONATION

DESCRIPTIVE NOTE: 648-659P.

ABSTRACT: THIS ARTICLE DISCUSSES THE USE OF ACTIVATED CARBON IN THE TREATMENT OF POTABLE WATER IN FRANCE. OPERATING AND PILOT PROJECTS EMPLOYING SIMPLE FILTRATION AND DOUBLE FILTRATION ON SAND AND CARBON WITH OZONATION ARE DETAILED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004442

PUBLICATION DATE: 79

TITLE: PILOT PLANT TESTING OF ACTIVATED CARBON ADSORPTION SYSTEMS.

PERSONAL AUTHOR: CAIRO, PATRICK R.; AND OTHERS.

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; PUBLIC HEALTH; *ENVIRONMENTAL INFLUENCES; DRINKING WATER; *ACTIVATED CARBON; *OPERATIONS (WATER); ENGINEERING; CHEMICAL ANALYSIS; *RESEARCH; TECHNOLOGY; *WATER SUPPLY

DESCRIPTIVE NOTE: 660-673P.

ABSTRACT: THIS ARTICLE DESCRIBES THE DESIGN AND OPERATIONAL EXPERIENCES WITH PILOT PLANT TESTING OF CARBON ADSORPTION SYSTEMS USED IN THE TREATMENT OF DELAWARE RIVER WATER IN PENNSYLVANIA.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004443

PUBLICATION DATE: 79

TITLE: TREATMENT OF GROUNDWATER WITH GRANULAR ACTIVATED CARBON.

PERSONAL AUTHOR: WOOD, PAUL R.; DEMARCO, JACK

DESCRIPTOR: *WATER TREATMENT; WATER POLLUTION CONTROL; CHEMICAL ANALYSIS; ENVIRONMENTAL INFLUENCES; *ACTIVATED CARBON; *GROUNDWATER; PUBLIC HEALTH; ECONOMICS; *OPERATIONS (WATER); *RESEARCH; WATER SUPPLY

DESCRIPTIVE NOTE: 674-682P.

ABSTRACT: THIS ARTICLE DISCUSSES RESEARCH PROJECTS UNDERTAKEN IN FLORIDA TESTING THE EFFECTIVENESS OF FOUR TYPES OF GRANULAR ACTIVATED CARBON ON REMOVING ORGANIC SUBSTANCES FROM RAW, LIME SOFTENED, AND FINISHED WATERS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11

IRIS ACCESSION NUMBER: EW004444

PUBLICATION DATE: 79

TITLE: OPERATIONAL EXPERIENCES WITH ACTIVATED CARBON ADSORBERS AT WATER FACTORY 21.

PERSONAL AUTHOR: MCCARTY, PERRY L.; AND OTHERS.

DESCRIPTOR: *WASTEWATER TREATMENT *WATER POLLUTION CONTROL; OPERATIONS ANALYSIS; PUBLIC HEALTH; *ACTIVATED CARBON; *GROUNDWATER; RESEARCH; CHEMICAL ANALYSIS; *RECYCLING; *ENVIRONMENTAL INFLUENCES; TECHNOLOGY; *WATER RESOURCES; *OPERATIONS (WASTEWATER)

DESCRIPTIVE NOTE: 683-689P.

ABSTRACT: THIS PAPER DESCRIBES A TWO AND ONE-HALF YEAR OPERATIONAL EXPERIENCE BY THE ORANGE COUNTY (CALIF.) WATER DISTRICT TO TREAT MUNICIPAL WASTEWATER WITH GRANULAR ACTIVATED CARBON FOR INJECTION INTO GROUNDWATER.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004445

PUBLICATION DATE: 79

TITLE: THE COST OF GRANULAR ACTIVATED CARBON ADSORPTION TREATMENT IN THE U.S.

PERSONAL AUTHOR: GUMERMAN, ROBERT C.; AND OTHERS.

DESCRIPTOR: *WATER TREATMENT; *OPERATIONS (WATER); *COST EFFECTIVENESS; WATER POLLUTION CONTROL; *ACTIVATED CARBON; *CALCULATIONS; MANAGEMENT; MUNICIPALITIES; *ENGINEERING

DESCRIPTIVE NOTE: 690-696P.

ABSTRACT: THIS ARTICLE DISCUSSES 12 UNIT PROCESSES UTILIZED IN WATER TREATMENT SYSTEMS AND THEIR ASSOCIATED COST CURVES. EXAMPLE CALCULATIONS AND THE USE OF COMPUTERS ARE PROVIDED AS AIDS IN COST CURVE DEVELOPMENT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N11.

IRIS ACCESSION NUMBER: EW004446

PUBLICATION DATE: 79

TITLE: REMOTE REGISTER/METER REPLACEMENT PROGRAM.

PERSONAL AUTHOR: HOLT, JACK A.; MOLLI, KENNETH C.

DESCRIPTOR: *WATER SUPPLY; *UTILITIES; MUNICIPALITIES; TECHNOLOGY; *METERS; *WATER METERS; EQUIPMENT; *COST EFFECTIVENESS; RESEARCH; *OPERATIONS (WATER)

DESCRIPTIVE NOTE: 23-24P.

ABSTRACT: THIS ARTICLE REPORTS ON THE WATER METER REPLACEMENT PROGRAM USING REMOTE REGISTERING METERS IN COLUMBUS, OHIO. EQUIPMENT, COST EFFECTIVENESS, AND ADDITIONAL BENEFITS OF THE PROGRAM ARE DISCUSSED.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004447

PUBLICATION DATE: 79

TITLE: FROM SCREENING TO FILTRATION: TREATING THE WATER SUPPLY-PART 4.

PERSONAL AUTHOR: HUNDAL, H. S.; AND OTHERS.

DESCRIPTOR: *WATER SUPPLY; WATER POLLUTION CONTROL; ENVIRONMENTAL INFLUENCES; UTILITIES; *DESALINATION; *TECHNOLOGY; *OPERATIONS (WATER); PUBLIC HEALTH.

DESCRIPTIVE NOTE: 25P.

ABSTRACT: THE METHODS AND COSTS FOR MANUFACTURING USABLE WATER FROM OTHERWISE UNACCEPTABLE SOURCES IS DISCUSSED. THIS IS THE FOURTH PART IN A SERIES OF WATER TREATMENT ARTICLES.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004448
PUBLICATION DATE: 79

TITLE: DESIGNING AN ENERGY-EFFICIENT WASTEWATER TREATMENT PLANT-PART 2.

DESCRIPTOR: *WASTEWATER TREATMENT; *TECHNOLOGY; *COST EFFECTIVENESS; *ENERGY CONSERVATION; SLUDGE; *OPERATIONS (WASTEWATER); TECHNOLOGY; ENVIRONMENTAL INFLUENCES; MANAGEMENT; UTILITIES

DESCRIPTIVE NOTE: 27-28P.

ABSTRACT: THIS ARTICLE IS THE SECOND IN A SERIES DISCUSSING WASTEWATER TREATMENT PLANT EFFICIENCY. ENERGY CONVERSIONS AND SAVINGS ARE HIGHLIGHTED IN DISCUSSIONS OF HEATING REQUIREMENTS, LIGHTING, INSULATION, AND SOLAR HEATING.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004449

PUBLICATION DATE: 79

TITLE: DOWNGRADING COSTS ON UPGRADING SMALL WATER SYSTEMS.

DESCRIPTOR: *WATER TREATMENT; UTILITIES; *WATER SUPPLY; EQUIPMENT; *COST EFFECTIVENESS; *FACILITY GUIDELINES; *FACILITIES; DESIGN

DESCRIPTIVE NOTE: 30P.

ABSTRACT: THIS ARTICLE DESCRIBES THE WATER TREATMENT PLANT REMODELING UNDERTAKEN BY A SMALL COMMUNITY TO UPGRADE AN ANTIQUATED SYSTEM WHILE KEEPING THE COST LOW.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004450

PUBLICATION DATE: 79

TITLE: ATTACK PUMP NOISE FOUR WAYS-PART 2.

PERSONAL AUTHOR: FRENCH, WILLIAM W.

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *PUMPS; HYDRAULICS

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: THIS ARTICLE IS THE SECOND IN A SERIES DISCUSSING THE SELECTION AND INSTALLATION OF PUMPS. EMPHASIZED IS THE EFFECT OF OPERATION AND MAINTENANCE ON PUMP NOISE.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004451
PUBLICATION DATE: 79

TITLE: DESIGNING FOR COARSE SAND FILTRATION SYSTEMS-PART 2.

PERSONAL AUTHOR: WALTERS, J. G.

DESCRIPTOR: *WASTEWATER TREATMENT; *OPERATIONS (WASTEWATER); EQUIPMENT; TECHNOLOGY; *FILTRATION; ENVIRONMENTAL INFLUENCES; COST EFFECTIVENESS; MAINTENANCE; *SAND FILTRATION

DESCRIPTIVE NOTE: 34-35P.

ABSTRACT: THIS ARTICLE DISCUSSES THE DESIGN, OPERATION, AND MAINTENANCE OF COARSE SAND FILTER SYSTEMS IN WASTEWATER TREATMENT.

AVAILABILITY: WATER AND SEWAGE WORKS; V126 N12.

IRIS ACCESSION NUMBER: EW004452

PUBLICATION DATE: 79

TITLE: NEW PROBLEMS CAN OCCUR WITH ANAEROBIC DIGESTION.

PERSONAL AUTHOR: TAVERY, MARY ANN; NELSON, JOHN.

DESCRIPTOR: *WASTEWATER TREATMENT; WATER POLLUTION CONTROL; *OPERATIONS (WASTEWATER); RESEARCH; *ANAEROBIC DIGESTION; *SLUDGE; MAINTENANCE; FACILITY GUIDELINES; ENVIRONMENTAL INFLUENCES; RECYCLING.

DESCRIPTIVE NOTE: 14-15 & 47P.

ABSTRACT: THIS ARTICLE DISCUSSES THE PROBLEMS ENCOUNTERED BY THE DENVER SEWAGE DISPOSAL DISTRICT IN ATTEMPTING TO STOP SLUDGE FOAMING AND INCREASE SOLIDS/LIQUID SEPARATION IN ITS ANAEROBIC DIGESTERS.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004453

PUBLICATION DATE: 79

TITLE: CLAW YOUR WAY TO LAND TREATMENT COSTS.

PERSONAL AUTHOR: YOUNG, C. EDWIN.

DESCRIPTOR: *WASTEWATER TREATMENT; *COST EFFECTIVENESS; *LAND USE; *OPERATIONS (WASTEWATER); *COMPUTERS; RESEARCH; TECHNOLOGY; AGRICULTURAL PRODUCTION; WATER POLLUTION CONTROL; ENVIRONMENTAL INFLUENCES; *LAND APPLICATION

DESCRIPTIVE NOTE: 17-19P.

ABSTRACT: THIS ARTICLE DESCRIBES A COMPUTER MODEL DESIGNED TO ESTIMATE THE COST OF LAND TREATMENT OF WASTEWATER (CLAW).

THE SIX BASIC OPERATIONS CONSIDERED IN THE MODEL ARE: TREATMENT, TRANSMISSION, STORAGE, APPLICATION SYSTEMS, CROP SELECTION, AND EFFLUENT RECOVERY.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004454

PUBLICATION DATE: 79

TITLE: WANT A FLOCCULATING AGENT? THINK CATIONIC STARCHES.

PERSONAL AUTHOR: JACOB, J.; AND OTHERS.

DESCRIPTOR: *CHEMICAL REACTIONS; *WASTEWATER TREATMENT; COST EFFECTIVENESS; *OPERATIONS (WASTEWATER); *FLOCCULANTS; *CATIONIC STARCHES; *RESEARCH

DESCRIPTIVE NOTE: 20-22P.

ABSTRACT: THIS ARTICLE REPORTS ON LABORATORY TESTING OF THREE CATIONIC STARCHES FOR USE AS INDUSTRIAL WASTEWATER FLOCCULANTS. THEIR STRUCTURES, PROPERTIES, AND EFFECTIVENESS ARE COMPARED.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004455

PUBLICATION DATE: 79

TITLE: EXAMINE WATER QUALITY GOALS...GET MORE COST-EFFECTIVE...MANAGE BETTER AT LOCAL LEVEL.

PERSONAL AUTHOR: HECKROTH, CHARLES W.

DESCRIPTOR: *WATER POLLUTION CONTROL; *OPERATIONS (WASTEWATER); FACILITY GUIDELINES; *LEGISLATION; EPA; MANAGEMENT; MUNICIPALITIES; WATER QUALITY; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24-32P.

ABSTRACT: THIS ARTICLE HIGHLIGHTS THE MAJOR ISSUES WHICH WERE PRESENTED TO THE DELEGATES AT THE WATER POLLUTION CONTROL FEDERATION CONFERENCE IN 1979. TOPICS INCLUDE: THE EPA CONSTRUCTION GRANTS PROGRAM; INNOVATIVE TREATMENT; HAZARDOUS AND TOXIC SUBSTANCES; AND COST EFFECTIVENESS.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004456

PUBLICATION DATE: 79

TITLE: OZONE GETTING MORE THAN A PASSING NOD.

DESCRIPTOR: *WASTEWATER TREATMENT; *TECHNOLOGY; *OPERATIONS (WASTEWATER); PUBLIC HEALTH; *OZONATION; *OZONE; *DISINFECTION; ENGINEERING; RESEARCH; COST EFFECTIVENESS

DESCRIPTIVE NOTE: 32-34P.

ABSTRACT: THIS ARTICLE DISCUSSES THE IMPACT OF OZONATION ON THE WASTEWATER TREATMENT INDUSTRY AS AN ALTERNATIVE METHOD FOR DISINFECTION. RESEARCH RESULTS AND CASE HISTORIES ARE CITED.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004457

PUBLICATION DATE: 79

TITLE: TRAINING PROGRAM IMPROVES PLANT PERFORMANCE.

PERSONAL AUTHOR: CLAVEL, ROBERT L.; HOLLENBECK, ALAN J.

DESCRIPTOR: *ENVIRONMENTAL TECHNICIANS; *JOB SKILLS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *START-UP; EQUIPMENT; MANAGEMENT; *TRAINING PROGRAMS; PROGRAM DESCRIPTIONS

DESCRIPTIVE NOTE: 35-37P.

ABSTRACT: DISCUSSED IS AN IN-SERVICE TRAINING PROGRAM UNDERTAKEN IN WHEATON, ILLINOIS, FOR WASTEWATER TREATMENT PLANT PERSONNEL. THE 15 WEEK PROGRAM CONSISTED OF OPERATIONS AND PROCESS CONTROL, LABORATORY EQUIPMENT PROCEDURES, AND PLANT MANAGEMENT SYSTEMS.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004458

PUBLICATION DATE: 79

TITLE: PREVENT BACKFLOW IN UNCONTROLLED CROSS-CONNECTIONS.

PERSONAL AUTHOR: SCARLOTT, WILLIAM H.

DESCRIPTOR: *WATER QUALITY; PUBLIC HEALTH; WATER POLLUTION CONTROL; EQUIPMENT; FACILITY GUIDELINES; *OPERATIONS (WATER); *UTILITIES; *WATER SUPPLY; *CROSS-CONNECTIONS

DESCRIPTIVE NOTE: 38-39P.

ABSTRACT: THIS ARTICLE DISCUSSES THE RESPONSIBILITIES OF CUSTOMERS, SURVEYORS, AND HEALTH AGENCIES IN ELIMINATING UNPROTECTED CROSS-CONNECTIONS IN WATER SUPPLY SYSTEMS. THE ACTIONS OF PALM SPRINGS, ARE CITED IN CONJUNCTION WITH THE CALIFORNIA STATE LAW REQUIREMENTS.

AVAILABILITY: WATER AND WASTES ENGINEERING; V16 N12.

IRIS ACCESSION NUMBER: EW004459
PUBLICATION DATE: 79

TITLE: WATER METER WARRANTIES: HOW GOOD ARE THEY?

DESCRIPTOR: *WATER SUPPLY; UTILITIES; *EQUIPMENT; MUNICIPALITIES; *STANDARDS; COST EFFECTIVENESS; *WATER METERS; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 25-28P.

ABSTRACT: THIS ARTICLE DISCUSSES THE STANDARDS ESTABLISHED BY THE AWWA IN REGARD TO RESIDENTIAL COLD-WATER METERS. AREAS ADDRESSED INCLUDE: EXCESSIVE WEAR; TEMPERATURE EXTREMES; CORROSION; AND MATERIALS IN SUSPENSION.

AVAILABILITY: AMERICAN CITY AND COUNTY; V94 N12.

IRIS ACCESSION NUMBER: EW004460

PUBLICATION DATE: 79

TITLE: THE JOB OF IMPROVING WATER QUALITY.

DESCRIPTOR: *CONFERENCES; *ENVIRONMENT; INDUSTRY; ORGANICS; RECYCLING; *TECHNOLOGICAL ADVANCEMENT; WASTES; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER POLLUTION CONTROL FEDERATION; *WATER QUALITY

DESCRIPTIVE NOTE: 1454-1456P.
ABSTRACT: SUMMARIZED ARE THE ACTIVITIES AND EVENTS OF THE 52ND ANNUAL CONFERENCE OF THE WATER POLLUTION CONTROL FEDERATION HELD IN HOUSTON, TEXAS. ADVANCES IN WASTE WATER TREATMENT TECHNOLOGY, SUCH AS DUPONT'S POWDERED ACTIVATED CARBON TREATMENT AND SOLAR DIGESTERS, ARE DETAILED.

AVAILABILITY: ENVIRONMENTAL SCIENCE AND TECHNOLOGY; V13 N12.

IRIS ACCESSION NUMBER: EW004461

PUBLICATION DATE: 79

TITLE: TOXIC SUBSTANCES IN THE GREAT LAKES.

PERSONAL AUTHOR: DELFINO, JOSEPH J.

DESCRIPTOR: CHEMICAL ANALYSIS; CHEMICAL REACTIONS; *ECOLOGICAL INFLUENCES; ECOLOGY; *HEAVY METALS; MANAGEMENT; *GREAT LAKES; POLYCHLORINATED BIPHENYLS; *ORGANIC POLLUTANTS; PESTICIDES; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WATER QUALITY; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 1462-1468P.

ABSTRACT: PRESENTED IS AN OVERVIEW OF THE ORIGIN, DISTRIBUTION, AND FATE OF SOME HEAVY METALS AND ORGANICS IN THE GREAT LAKES. RESOURCE MANAGEMENT STRATEGIES TO CONTROL THE TOXIC SUBSTANCES IDENTIFIED ARE SUGGESTED.
AVAILABILITY: ENVIRONMENTAL SCIENCE AND TECHNOLOGY; V13 N12.

IRIS ACCESSION NUMBER: EW004462

PUBLICATION DATE: 79

TITLE: ANALYSIS OF ORGANIC WATER POLLUTANTS.

PERSONAL AUTHOR: KEITH, LAWRENCE H.

DESCRIPTOR: *CHEMICAL ANALYSIS; CHEMISTRY; ENVIRONMENT; *MEASUREMENT; *ORGANIC POLLUTANTS; AMERICAN CHEMICAL SOCIETY; *CONSENSUS VOLUNTARY REFERENCE COMPOUNDS (CVRC'S); *REFERENCE COMPOUNDS; *WATER POLLUTION CONTROL; WATER QUALITY; *LABORATORY TECHNIQUES

DESCRIPTIVE NOTE: 1469-1471P.

ABSTRACT: PRESENTED IS A LIST OF CONSENSUS VOLUNTARY REFERENCE COMPOUNDS (CVRC'S) DEVELOPED BY AN INTERNATIONAL PANEL OF ENVIRONMENTAL CHEMISTS TO SERVE AS A BASIS FOR ESTABLISHING REFERENCES AGAINST WHICH VARIATIONS OR IMPROVEMENTS IN ANALYTICAL METHODOLOGY CAN BE COMPARED.

AVAILABILITY: ENVIRONMENTAL SCIENCE AND TECHNOLOGY; V13 N12.

IRIS ACCESSION NUMBER: EW004465

PUBLICATION DATE: 76

TITLE: RIVER WATER QUALITY ASSESSMENT-PROCEEDINGS FROM AWWA SEMINAR.

DESCRIPTOR: *CONFERENCES; *IMPACT ANALYSIS; PLANNING; QUALITY CONTROL; *RIVERS; *SEMINARS; SAMPLING; *WATER QUALITY; *WATER RESOURCES; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 60P.

ABSTRACT: CONTAINED ARE PAPERS PRESENTED AT THE RIVER WATER QUALITY ASSESSMENT SEMINAR, HELD BY THE AMERICAN WATER WORKS ASSOCIATION IN 1976. CONTAINS ARTICLES ON HISTORICAL METHODS AND CURRENT PHILOSOPHY APPLICATION AND PLANNING OF RIVER ASSESSMENT PROGRAMS; ENVIRONMENTAL ASSESSMENT OF IMPACTS OF COAL DEVELOPMENT; RIVER QUALITY SAMPLING; AND HYDROLOGICAL DATA ANALYSIS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, 6666 WEST QUINCY AVE, DENVER, CO 80235. PRICE: $3.00, NO. 20133.

IRIS ACCESSION NUMBER: EW004466
PUBLICATION DATE: 74

TITLE: PROCESSING WATER-TREATMENT-PLANT SLUDGE.

PERSONAL AUTHOR: FABER, HARRY A; TARAS, MICHAEL J.

DESCRIPTOR: CHEMICAL REACTIONS; *ENVIRONMENT; *ECONOMICS; *EVALUATION; MANAGEMENT; RECYCLING; *SLUDGE; SOLID WASTES; TECHNOLOGICAL ADVANCEMENTS; UTILITIES; *WATER TREATMENT; *WATER RESOURCES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 152P.

ABSTRACT: THIS SERIES OF REPRINTED ARTICLES (FROM THE JOURNAL OF THE AMERICAN WATER WORKS ASSOCIATION) RELATES TO THE DISPOSAL OF SLUDGE FROM WATER-TREATMENT PLANTS. PAPERS CONSIDER THE PROBLEMS OF OBTAINING, HANDLING AND DISPOSAL OF SLUDGE IN AN ENVIRONMENTALLY SOUND MANNER. ALSO INCLUDED ARE DISCUSSIONS OF TECHNOLOGICAL AND ECONOMIC ASPECTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, 6666 WEST QUINCY AVE., DENVER, CO 80235. PRICE: $4.50.

IRIS ACCESSION NUMBER: EW004468

PUBLICATION DATE: 78

TITLE: MANAGEMENT OF LOCAL POLLUTION CONTROL PROGRAMS.

PERSONAL AUTHOR: HONOUR, WALTER W.; CROSS, FRANK L.

DESCRIPTOR: ADMINISTRATION; *AIR POLLUTION CONTROL; *ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; MANAGEMENT; MONITORING; *NOISE POLLUTION; PERSONNEL; *POLLUTION; PUBLIC RELATIONS; *SOLID WASTES; *WATER POLLUTION CONTROL; WATER RESOURCES; WASTE DISPOSAL

DESCRIPTIVE NOTE: 212P.

ABSTRACT: THIS PUBLICATION PROVIDES BASIC INFORMATION FOR ALL LOCAL GOVERNMENT OFFICIALS, INDUSTRIALISTS AND COLLEGE STUDENTS WHO ARE INVOLVED WITH ENVIRONMENTAL PROTECTION. IT PROVIDES DETAILS ON LOCAL GOVERNMENT ORGANIZATION, ADMINISTRATION AND OPERATIONS THAT ARE INVOLVED IN MANAGEMENT OF LOCAL POLLUTION PROBLEMS. INFORMATION IS ALSO GIVEN ON MONITORING AND SURVEYING AIR, WATER, NOISE AND SOLID WASTE POLLUTION. EFFECTIVE ENFORCEMENT PROCEDURES FOR COMPLYING WITH GOVERNMENTAL ENVIRONMENTAL STANDARDS ARE ALSO LISTED. WHILE LOCAL PROGRAMS VARY WIDELY IN SIZE, SCOPE, RESPONSIBILITIES, AND RESOURCES ALLOCATED, THIS PUBLICATION SERVES WELL AS A PATTERN FROM WHICH AN INFRASTRUCTURE CAN BE ADAPTED TO FIT LOCAL NEEDS, AND ADDS NEW INSIGHT TO THOSE INTERESTED IN ENVIRONMENTAL CONTROL WORK.

AVAILABILITY: TECHNOMIC, 265 POST ROAD WEST, WESTPOINT, CT 06880 PRICE $25.00.

IRIS ACCESSION NUMBER: EW004472
PUBLICATION DATE: 78

TITLE: OUR NATION'S WETLANDS.

PERSONAL AUTHOR: HORWITZ, ELINOR LANDER.

DESCRIPTOR: AGRICULTURE; CASE STUDIES; DEVELOPMENT; ECOLOGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; FEDERAL GOVERNMENT; *GOVERNMENT ROLE; *LAND USE; *MANAGEMENT; *NATURAL RESOURCES; *WATER RESOURCES; *WETLANDS

DESCRIPTIVE NOTE: 70P. STOCK NUMBER: 041-011-00045-9

ABSTRACT: PROVIDED IS A BROAD REVIEW OF THE STATUS OF OUR NATION'S WETLANDS AND A GUIDE TO FURTHER INFORMATION RELATED TO WETLAND TOPICS. THE DOCUMENT IS DESIGNED TO PROVIDE THE LAYREADER WITH A SCIENTIFIC, SOCIAL, AND POLITICAL UNDERSTANDING OF OUR CURRENT WETLAND POLICIES AND CONCERNS. TOPICS INCLUDE FORMATION AND KINDS OF WETLANDS, WETLAND FUNCTIONS, AGRICULTURE IN WETLANDS, TIMBER PRODUCTION IN WETLANDS, ALTERATION OF WETLANDS FOR RESIDENCES, TRANSPORTATION, INDUSTRY AND RECREATION, AND THE ROLE OF GOVERNMENT.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402.

IRIS ACCESSION NUMBER: EW004473

PUBLICATION DATE: MAR 79

TITLE: IDENTIFYING AND EVALUATING ENVIRONMENTAL IMPACTS ASSOCIATED WITH TIMBER HARVEST SCHEDULING POLICIES.

PERSONAL AUTHOR: RANDALL, ROBERT M.; SASSAMAN, ROBERT W.

DESCRIPTOR: *AMENITY VALUES (FOREST); DESIGN; *ECOLOGY; *ENVIRONMENT; ECONOMICS; *FORESTRY; *IMPACT EVALUATION; *MANAGEMENT; *MOUNT HOOD NATIONAL FOREST; *OPERATIONS (LOGGING); *OREGON; RECREATION; RESEARCH; SILVICULTURE; WATER RESOURCES

DESCRIPTIVE NOTE: 20P.

ABSTRACT: IDENTIFIED AND EVALUATED ARE EXPECTED IMPACTS ON THE ECOSYSTEM AND NONTIMBER BENEFITS (PEOPLE'S USE OF THE RESOURCES-RECREATION, HUNTING, SWIMMING, FISHING) RESULTING FROM ALTERNATIVE TIMBER HARVEST SCHEDULING POLICIES. ENVIRONMENTAL CRITERIA ARE ESTABLISHED AND UTILIZED IN EVALUATIONS OF TIMBER HARVEST AND MANAGEMENT DATA.

AVAILABILITY: PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, PO BOX 3141, PORTLAND, OR 97208.

IRIS ACCESSION NUMBER: EW004474

PUBLICATION DATE: 78

TITLE: PROGRAMS FOR ROAD NETWORK PLANNING.

PERSONAL AUTHOR: CARSON, WARD W.; DYKSTRA, DENNIS P.

DESCRIPTOR: ADMINISTRATION; CALCULATION; *COMPUTER PROGRAMS; *DESIGN; ENGINEERS; FORESTRY; MANAGEMENT; *OPERATIONS (LOGGING); *PLANNING; *ROADS; *TRANSPORT SYSTEMS; WATER QUALITY

DESCRIPTIVE NOTE: 21P.

ABSTRACT: DESCRIBED ARE FOUR COMPUTER PROGRAMS DEVELOPED TO ASSIST LOGGING ENGINEERS IN PLANNING TRANSPORTATION IN A FOREST. THESE PROGRAMS; USED TOGETHER, FIND THE SHORTEST PATH THROUGH A TRANSPORTATION NETWORK FROM A POINT OF DEPARTURE TO A DESTINATION. THREE OF THE PROGRAMS USE THE DIGITIZING AND PLOTTING CAPABILITIES OF A PROGRAMABLE, DESK-TOP CALCULATOR SYSTEM. THE FOURTH PROGRAM SOLVES THE PROBLEM BY AN EFFICIENT OPTIMIZATION ALGORITHM. THE BASIC LANGUAGE PROGRAMS ARE DESCRIBED THROUGH AN EXAMPLE PROBLEM, AND COMPLETE LISTINGS ARE PROVIDED.

AVAILABILITY: PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, PO BOX 3141, PORTLAND, OR 97208.

IRIS ACCESSION NUMBER: EW004475

PUBLICATION DATE: 79

TITLE: AUTOMATED ANALYSIS OF TIMBER ACCESS ROAD ALTERNATIVES.

PERSONAL AUTHOR: BURKE, DOYLE

DESCRIPTOR: ADMINISTRATION; *ANALYTICAL TECHNIQUES; DESIGN; *EVALUATION; FORESTRY; MEASUREMENT; *OPERATIONS (LOGGING); *PLANNING; *ROADS; *TRANSPORT SYSTEMS; WATER QUALITY.

DESCRIPTIVE NOTE: 40P.

ABSTRACT: PRESENTED IS AN ANALYTIC SYSTEM FOR EVALUATING TIMBER ACCESS ROAD ALTERNATIVES. THE SYSTEM USES TOPOGRAPHIC MAPS AND A DESK-TOP CALCULATOR, DIGITIZER, AND PLOTTER. THE LOGIC AND MATHEMATICS ARE DISCUSSED. THE SYSTEM PRESENTED IS DESIGNED FOR PRE-HARVEST PLANNING AND IS BASED ON MAP DATA. THE ANALYTIC ROUTINES ARE STRUCTURED TO ACCEPT FIELD DATA WITH MINOR PROGRAMMING CHANGES.

AVAILABILITY: PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, PO BOX 3141, PORTLAND, OR 97208

IRIS ACCESSION NUMBER: EW004477

PUBLICATION DATE: 75

TITLE: CLEARCUTTING IN PENNSYLVANIA.

DESCRIPTOR: AESTHETICS; AQUATIC ENVIRONMENT; *CLEARCUTTING; EROSION; *EVALUATION; *FORESTRY; *MANAGEMENT; *PENNSYLVANIA; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); SOILS; WATER RESOURCES; WILDLIFE

DESCRIPTIVE NOTE: 81P.

ABSTRACT: THIS REPORT, PREPARED BY AN ADHOC COMMITTEE, EVALUATES THE PRACTICE OF CLEARCUTTING IN THE HARDWOOD FORESTS OF PENNSYLVANIA. THE REPORT CONSISTS OF AN INTRODUCTION AND SEPARATE CHAPTERS ON THE EFFECTS OF CLEARCUTTING ON SIX FOREST RESOURCES-AESTHETICS, FISHERIES, SOILS, TIMBER, WATER, AND WILDLIFE.

AVAILABILITY: THE PENNSYLVANIA STATE UNIVERSITY, BOX 6000, UNIVERSITY PARK, PA 16802 PRICE: $2.00 PER COPY.

IRIS ACCESSION NUMBER: EW004478

PUBLICATION DATE: 78

TITLE: THE FOREST ECOSYSTEM OF SOUTHEAST ALASKA. 5. SOIL MASS MOVEMENT.

PERSONAL AUTHOR: SWANSTON, DOUGLAS N.

DESCRIPTOR: *EROSION; *FOREST DAMAGE; FORESTRY; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; OPERATIONS (LOGGING); *RESEARCH; *SOIL; WATER QUALITY; WATER RESOURCES; *ALASKA

DESCRIPTIVE NOTE: 22P.

ABSTRACT: PRESENTED IS THE FIFTH IN A SERIES OF PUBLICATIONS SUMMARIZING KNOWLEDGE ABOUT THE FOREST RESOURCES OF SOUTHEAST ALASKA. DISCUSSED IS THE SOIL MASS MOVEMENT PROCESS AND THE IMPACT OF TIMBER HARVESTING OPERATIONS ON THE INITIATION AND ACCELERATION OF THOSE MOVEMENTS. EFFECTIVE MANAGEMENT PRACTICES ARE IDENTIFIED.

AVAILABILITY: PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION, P.O.BOX 3141 PORTLAND, OR 97208.

IRIS ACCESSION NUMBER: EW004479

PUBLICATION DATE: 79

TITLE: LOGGING ROADS AND SKID TRAILS.

PERSONAL AUTHOR: CLOUD, JOSEPH D.; DATENA, JOHN F.

DESCRIPTOR: DESIGN; *EROSION CONTROL; FORESTRY; *GUIDELINES; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); *PLANNING; *ROADS; SILVICULTURE; SKID TRAILS; WATER POLLUTION CONTROL; WATER QUALITY

DESCRIPTIVE NOTE: 21P.

ABSTRACT: PRESENTED ARE GUIDELINES PROVIDING THE BASIC METHODS TO MINIMIZE HAUL ROAD AND SKID TRAIL EROSION. TOPICS

INCLUDE LOGGING EROSION FACTS, WATER CONTROL, PLANNING ROAD LOCATIONS, LOGGING OPERATIONS, CLOSING ROADS AND TRAILS AFTER LOGGING, BRIDGE DESIGN, FOREST WATER QUALITY CONSERVATION, AND A CHECKLIST FOR EROSION CONTROL ACTIVITIES.

AVAILABILITY: INDIANA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY, 613 STATE OFFICE BUILDING, INDIANAPOLIS, IN 46204.

IRIS ACCESSION NUMBER: EW004481

PUBLICATION DATE: 79

TITLE: THE USE OF FABRICS IN FOREST SERVICE ROAD CONSTRUCTION.

PERSONAL AUTHOR: PELZNER, ADRIAN AND OTHERS.

DESCRIPTOR: *CONSTRUCTION MATERIALS; *DESIGN; *DRAINAGE; *ENGINEERING; EROSION CONTROL; *FABRICS; FORESTRY; *FOREST SERVICE; *GUIDELINES; RESEARCH; *ROADS; TECHNOLOGY; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 40P.

ABSTRACT: DESCRIBED IS A TRIAL USE PROGRAM BY THE FOREST SERVICE EVALUATING THE USE OF FABRICS AS A ROAD CONSTRUCTION MATERIAL. USES DESCRIBED INCLUDE: FILTRATION (DRAINAGE), SEPARATION, SUBGRADE RESTRAINT, EARTH STRENGTHENING, AND EROSION CONTROL.

AVAILABILITY: EPA INFORMATION DISSEMINATION PROJECT, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW004483

PUBLICATION DATE: 79

TITLE: OHIO EROSION CONTROL AND SEDIMENT POLLUTION ABATEMENT GUIDE FOR AGRICULTURAL LAND.

PERSONAL AUTHOR: BONE, SAMUAL W.; AND OTHERS.

DESCRIPTOR: *AGRICULTURE; *CONSERVATION (ENVIRONMENT); *EROSION CONTROL; *GUIDELINES; LAND USE; *MANAGEMENT; *OHIO; *NONPOINT SOURCE POLLUTION; RUNOFF; SEDIMENTATION; WATER POLLUTION CONTROL; WIND EROSION.

DESCRIPTIVE NOTE: 24P.

ABSTRACT: THIS POLLUTION ABATEMENT GUIDE FOR AGRICULTURAL LANDS IN OHIO: (1) OUTLINES A PROCEDURE FOR ESTIMATING THE RATE OF WATER EROSION ON AGRICULTURAL LAND, (2) LISTS MAXIMUM SOIL EROSION TOLERANCES, (3) GIVES CROPPING-MANAGEMENT AND CONSERVATION PRACTICE ALTERNATIVES FOR WATER EROSION CONTROL, (4) LISTS RECOMMENDED PRACTICES FOR EROSION CONTROL ON LEVEL LAND, (5) OUTLINES A PROCEDURE FOR ESTIMATING WIND EROSION OF SANDY SOILS, (6) SUGGESTS MAXIMUM RATES OF WIND EROSION THAT WOULD BE ALLOWED FOR VARIOUS SOILS AND CROPS, AND (7) GIVES CROPPING MANAGEMENT AND CONSERVATION PRACTICE ALTERNATIVES FOR WIND EROSION CONTROL. INFORMATION REQUIRED TO USE THIS GUIDE INCLUDE THE SOIL SERIES; FIELD LOCATION; COUNTY; LAND SLOPE; STEEPNESS AND LENGTH; CROPPING-MANAGEMENT SYSTEM; AND CONSERVATION PRACTICES APPLIED.

AVAILABILITY: THE OHIO STATE UNIVERSITY, COOPERATIVE EXTENSION SERVICE, COLUMBUS, OH 43210 FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004484

PUBLICATION DATE: 78

TITLE: FORESTS PROTECT WATER QUALITY-THE CLEAN WATER ACT OF 1977.

DESCRIPTOR: DESIGN; EROSION CONTROL; *FORESTRY; *LANDOWNERS (FOREST); LAWS; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); *PLANNING; ROADS; SILVICULTURE; 208 PLANS; WATER POLLUTION CONTROL; *WATER QUALITY; WATER RESOURCES.

DESCRIPTIVE NOTE: 12P.

ABSTRACT: PRESENTED IS A BOOKLET FOR FOREST LANDOWNERS DETAILING BEST MANAGEMENT PRACTICES FOR TIMBER HARVESTING AND REGENERATION. TOPICS INCLUDE LAWS, EROSION, CRITICAL AREAS THAT AFFECT WATER QUALITY, ROADS, SITE PREPARATION, PLANTING, HARVESTING, AND STREAM MANAGEMENT.

AVAILABILITY: U.S. ENVIRONMENTAL PROTECTION AGENCY REGION IV, 345 COURTLAND ST., ATLANTA, GA 30308 FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004485

PUBLICATION DATE: 76

TITLE: TIMBER HARVESTING GUIDELINES FOR NEW JERSEY.

DESCRIPTOR: EROSION CONTROL; FORESTRY; *GUIDELINES; MANAGEMENT; NEW JERSEY; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); PLANNING; *ROADS; *STATE PLANS; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 8P.

ABSTRACT: PRESENTED ARE THE TIMBER HARVESTING GUIDELINES FOR NEW JERSEY. THE GUIDELINES LIST PRACTICES THAT WILL PREVENT PROBLEMS IN LOGGING OPERATIONS AND PERMIT THE SAFE HARVESTING OF PRODUCTS FROM THE LAND. TOPICS INCLUDE STREAMS AND WATER, ROADS AND SKID TRAILS, ROADSIDES ALONG MAJOR TRAVEL CORRIDORS, AND CEDAR AND HARDWOOD SWAMPS.

AVAILABILITY: N.J. CHAPTER, SOCIETY OF AMERICAN FORESTERS, AND NEW JERSEY FORESTRY ASSOCIATION., FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004486
PUBLICATION DATE: 78

TITLE: TIMBER HARVESTING GUIDELINES FOR NEW YORK.

DESCRIPTOR: DESIGN; EROSION CONTROL; FORESTRY; *GUIDELINES; MANAGEMENT; *NEW YORK; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); PLANNING; *ROADS; *STATE PLANS; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 8P.

ABSTRACT: PRESENTED ARE THE TIMBER HARVESTING GUIDELINES FOR NEW YORK STATE. THE GUIDELINES LIST PRACTICES THAT WILL PREVENT PROBLEMS IN LOGGING OPERATIONS AND PERMIT THE SAFE HARVESTING OF PRODUCTS FROM THE LAND. TOPICS INCLUDE STREAMS AND WATER, ROADS AND SKID TRAILS AND ROADSIDES ALONG MAJOR TRAVEL CORRIDORS.

AVAILABILITY: EMPIRE STATE FOREST PRODUCTS ASSOCIATION AND NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004487

PUBLICATION DATE: JAN 79

TITLE: TIMBER HARVESTING PRACTICES FOR CONTROLLING EROSION.

DESCRIPTOR: *EROSION CONTROL; *FORESTRY; *GUIDELINES; *MANAGEMENT; *NEW HAMPSHIRE; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); PLANNING; ROADS; STATE PLANS; *STREAMS; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 25P.

ABSTRACT: COMPILED AND ILLUSTRATED ARE A SERIES OF PRACTICAL, TECHNICAL LAND MANAGEMENT PRACTICES TO MINIMIZE EROSION AND SEDIMENTATION FROM TIMBER HARVESTING OPERATIONS IN NEW HAMPSHIRE. TOPICS INCLUDE FILTER STRIPS, CUTTING PRACTICES NEAR WATER, SLASH REMOVAL FROM STREAMS, STABILIZATION OF TRUCK AND SKIDDER ROADS, STREAM CROSSINGS FOR SKIDDER ROADS, SKID ROADS, TRUCK ROADS, YARDING AREAS, AND CLOSURE OF UNMAINTAINED ROADS FOLLOWING LOGGING.

AVAILABILITY: NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION, NEW HAMPSHIRE. PRICE: $3.00

IRIS ACCESSION NUMBER: EW004488

PUBLICATION DATE: 75

TITLE: FOREST PRACTICES GUIDELINES RELATED TO WATER QUALITY.

DESCRIPTOR: EROSION; *FORESTRY; *GUIDELINES; *MANAGEMENT; *NORTH CAROLINA; *NONPOINT SOURCE POLLUTION; OPERATIONS (LOGGING); SILVICULTRUE; SOILS; STATE PLANS; *208 PLANS; *WATER RESOURCES; WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 36P.
ABSTRACT: PRESENTED ARE GENERAL GUIDELINES FOR FORESTRY PRACTICES RELATING TO WATER QUALITY FOR USE IN NORTH CAROLINA'S 208 SILVICULTURAL PLANNING PROCESS. TOPICS INCLUDE FOREST PRACTICES, SOIL AND OVERLAND WATER FLOW, LOGGING, SITE PREPARATION, PESTICIDES, FERTILIZERS, AND FIRE RETARDANTS.

AVAILABILITY: NORTH CAROLINA DIVISION OF FOREST RESOURCES, DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT, NORTH CAROLINA. PRICE: $2.50.

IRIS ACCESSION NUMBER: EW004489

PUBLICATION DATE: JUN 76

TITLE: WATER QUALITY AND FORESTRY PRACTICES HANDBOOK.

DESCRIPTOR: EROSION; *FORESTRY; *GUIDELINES; MANAGEMENT; *VIRGINIA; *NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); ROADS; SEDIMENTATION; *STATE PLANS; WATER POLLUTION CONTROL; *WATER QUALITY.

DESCRIPTIVE NOTE: 40P.

ABSTRACT: DESCRIBED ARE EXISTING CONDITIONS AND PROBLEMS CONTRIBUTING TO WATER POLLUTION IN VIRGINIA DUE TO FOREST MANAGEMENT, FOREST PROTECTION, AND HARVESTING ACTIVITIES. GUIDELINES ARE PRESENTED FOR THE LOCATION, CONSTRUCTION, AND STABILIZATION OF LOG ROADS AND SKID TRAILS AND THE REDUCTION OF SOIL EROSION AND SEDIMENTATION. GUIDELINES FOR SILVICULTURAL PRACTICES NORMALLY CARRIED OUT ON FOREST LANDS IN VIRGINIA ARE ALSO INCLUDED.

AVAILABILITY: WALLACE F. CUSTRAD, STATE FORESTER, VIRGINIA DIVISION OF FORESTRY, RICHMOND, VA.

IRIS ACCESSION NUMBER: EW004491

PUBLICATION DATE: 76

TITLE: HYDROSEEDING, STRAW, AND CHEMICALS FOR EROSION CONTROL.

PERSONAL AUTHOR: KAY, BURGESS L.

DESCRIPTOR: AGRICULTURE; *BOTANY; CHEMISTRY; *EROSION CONTROL; *MANAGEMENT; *HYDROSEEDING; NONPOINT SOURCE POLLUTION; *RESEARCH; SEDIMENTATION; *SEEDING; *WATER RESOURCES.

DESCRIPTIVE NOTE: 15P.

ABSTRACT: DISCUSSED ARE HYDROSEEDING AND THE ASSOCIATED MATERIALS UTILIZED IN CONTROLLING EROSION OR ASSISTING IN PLANT ESTABLISHMENT. TOPICS INCLUDE HYDROSEEDERS, FIBERS, ORGANIC SEEDING ADDITIVES, PLASTIC EMULSIONS, STRAW AND TACKIFIERS, LEGUME INOCULATION, USE OF GROWTH REGULATORS, FERTILIZATION, AND METHODS AND COSTS. PRESENTED IN AN

APPENDIX ARE SUMMARIES OF THESE RESEARCH STUDIES: LIMITING SEED DAMAGE IN HYDROSEEDERS, STRAW TACKIFIER TESTS, AND SUCCESSFUL LEGUME INOCULATION IN HYDROSEEDING.

AVAILABILITY: BURGESS L. KAY, WILDLAND SEEDING SPECIALIST, UNIVERSITY OF CALIFORNIA, DAVIS, CALIFORNIA.

IRIS ACCESSION NUMBER: EW004492

PUBLICATION DATE: 76

TITLE: THE USE OF VEGETATION FOR STREAMBANK EROSION CONTROL.

PERSONAL AUTHOR: SCHWENDIMAN, JOHN L.

DESCRIPTOR: BOTANY; *ENGINEERING; *EROSION CONTROL; GRASSES; *GUIDELINES; HYDROLOGY; MAINTENANCE; *MANAGEMENT; *STREAMBANK PROTECTION; *STREAMS; *VEGETATION COVER; *WASHINGTON; *WATER RESOURCES

DESCRIPTIVE NOTE: 12P.

ABSTRACT: DISCUSSED ARE GUIDELINES, PRACTICES, AND SPECIFICATIONS FOR STABILIZING AND PROTECTING BANKS OF STREAMS, LAKES, ESTUARIES, OR EXCAVATED CHANNELS AGAINST SCOUR AND EROSION BY VEGETATIVE MEANS IN WASHINGTON. CHARTS, ADAPTED FROM THE SOIL CONSERVATION SERVICE HANDBOOKS, INDICATING THE ADAPTATION OF GRASSES TO VARIOUS STREAM SLOPES, VOLUMES, AND VELOCITIES ARE INCLUDED.

AVAILABILITY: JOHN L. SCHWENDIMAN, USDA, SPOKANE, WASHINGTON.

IRIS ACCESSION NUMBER: EW004493

PUBLICATION DATE: 79

TITLE: EPA'S INNOVATIVE AND ALTERNATIVE TECHNOLOGY PROGRAM.

PERSONAL AUTHOR: LUSSIER, DENIS; BRUNK, JOHN.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; ENERGY CONSERVATION; *FACILITY GUIDELINES; *GRANTS; LEGISLATION; *ENVIRONMENTAL PROTECTION AGENCY; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *TECHNOLOGY; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 33-36P.

ABSTRACT: THIS ARTICLE DESCRIBES THE PROGRAM DEVELOPED BY E.P.A. IN CONJUNCTION WITH THE CLEAN WATER ACT OF 1977 FOR THE AVAILABILITY OF GRANT MONIES RELATED TO THE DESIGN AND CONSTRUCTION OF MUNICIPAL WASTEWATER TREATMENT FACILITIES. A SCHEMA FOR REVIEW AND ANALYSIS OF ALTERNATIVE/INNOVATIVE TECHNOLOGIES IS PROVIDED.

AVAILABILITY: POLLUTION ENGINEERING; V11 N11

IRIS ACCESSION NUMBER: EW004494

PUBLICATION DATE: 79

TITLE: GUIDE TO OZONE EQUIPMENT SELECTION.

PERSONAL AUTHOR: DERRICK, DAVID G.; PERRICH, JERRY R.

DESCRIPTOR: COST EFFECTIVENESS; *EQUIPMENT SELECTION; ENGINEERING; *GUIDELINES; *MANUFACTURERS; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *OZONE; *TECHNOLOGY; WATER POLLUTION CONTROL; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: DISCUSSED IS THE IMPORTANCE AND EMERGENCE OF OZONE TREATMENT TECHNOLOGY IN WATER POLLUTION CONTROL. A LIST OF MAJOR U.S. MANUFACTURERS OF OZONE GENERATING EQUIPMENT IS PROVIDED.

AVAILABILITY: POLLUTION ENGINEERING; V11 N11

IRIS ACCESSION NUMBER: EW004495

PUBLICATION DATE: 77

TITLE: THE EVALUATION OF DAM SAFETY.

PERSONAL AUTHOR: WILLIS, HOMER B.; AND OTHERS.

DESCRIPTOR: *DAMS; *DESIGN; ENVIRONMENT; *EVALUATION METHODS; *HYDROLOGY; *INSPECTION; PLANNING; REGIONAL PLANNING; *RESERVOIRS; *SAFETY; STANDARDS; *WATER RESOURCES

DESCRIPTIVE NOTE: 524P.

ABSTRACT: THIS COLLECTION OF PAPERS DEALS WITH THE SAFETY OF DAMS AND OTHER SAFETY CONSIDERATIONS ASSOCIATED WITH WATER RESERVOIRS. INCLUDED ARE EIGHT SECTIONS: (1) STATICS OF DAM SAFETY; (2) FAILURE AND NEAR FAILURE; (3) SAFETY INSPECTIONS; (4) POTPOURRI; (5) EVALUATION OF STATIC STABILITY; (6) EVALUATION OF SEISMIC STABILITY; (7) EVALUATION OF HYDROLOGIC AND HYDRAULIC CONDITIONS; AND (8) THE ROLE OF ENGINEERING FIRMS IN A NATIONAL DAM SAFETY PROGRAM.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017 PRICE: $16.00

IRIS ACCESSION NUMBER: EW004496

PUBLICATION DATE: 78

TITLE: CARRYING CAPACITY OF RECREATIONAL WATERS.

PERSONAL AUTHOR: WINEGAR, ROGER; KNUDSON, DOUGLAS.

DESCRIPTOR: *ECOLOGY; *INDIANA; LAKES; *MANAGEMENT; NATURAL RESOURCES; *PLANNING; *RECREATION; *RESEARCH: *RIVERS; WATER

POLLUTION CONTROL; *WATER RESOURCES.

DESCRIPTIVE NOTE: 16P.

ABSTRACT: INVESTIGATED IS THE ABILITY OF WATER BODIES IN INDIANA TO ACCOMODATE PARTICULAR TYPES OF USES AND A GIVEN NUMBER OF USERS WITHIN DEFINED LEVELS OF ECOLOGICAL DISTURBANCE AND USE CONFLICTS. THE QUESTIONS OF POLLUTION, QUALITY EXPERIENCE, SAFETY, AND IMPACTS ON LAKE EDGE RESOURCES ARE DISCUSSED FROM THE POINT OF VIEW OF PREVIOUS RESEARCH.

AVAILABILITY: PURDUE UNIVERSITY, DEPT OF FORESTRY AND NATURAL RESOURCES, INDIANAPOLIS, IN., FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004497

PUBLICATION DATE: 72

TITLE: HANDBOOK OF ENVIRONMENTAL MANAGEMENT-VOLUME 1, FUNDAMENTALS.

PERSONAL AUTHOR: HILADO, CAROLOS J.

DESCRIPTOR: AIR POLLUTION CONTROL; ECOLOGY; ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; *ENVIRONMENTAL INFLUENCES; *MANAGEMENT; *NATURAL RESOURCES; POPULATION GROWTH; *POLLUTION; SCIENCE EDUCATION; WATER POLLUTION CONTROL; WATER RESOURCES.

DESCRIPTIVE NOTE: 113P.

ABSTRACT: THIS BOOK IS INTENDED AS A BROAD OVERVIEW OF ENVIRONMENTAL ISSUES FOR THE INTERESTED LAYMAN, CONCERNED CITIZENS, STUDENTS, AND DECISION-MAKERS. PRESENTED ARE DISCUSSIONS OF MAN AND ENVIRONMENT; POPULATION; FOOD SUPPLY; WATER RESOURCES; AIR RESOURCES; RAW MATERIALS; SUPPLY; AND ENERGY. OVER 80 TABLES AUGMENT DISCUSSIONS.

AVAILABILITY: TECHNOMIC PUBLISHING COMPANY, INC., 265 POST ROAD, WEST, WESTPORT, CT 06880. PRICE: $5.00

IRIS ACCESSION NUMBER: EW004498

PUBLICATION DATE: 73

TITLE: HANDBOOK OF ENVIRONMENTAL MANAGEMENT-VOLUME 2, FOOD FOR MANKIND.

PERSONAL AUTHOR: HILADO, CARLOS J.

DESCRIPTOR: AGRICULTURE; DIETETICS; *ENVIRONMENT; FISHERIES; *FOOD; FOOD STANDARDS; *HEALTH; *NATURAL RESOURCES; *NUTRITION; PESTICIDES; PUBLIC HEALTH; *PEST CONTROL; WATER RESOURCES

DESCRIPTIVE NOTE: 165P.

ABSTRACT: THIS VOLUME DISCUSSES THE ROLE OF FOOD SUPPLY AS PART OF THE ENVIRONMENTAL LIMITATIONS WITHIN WHICH MAN MUST LEARN TO LIVE. SEVEN CHAPTERS ARE PRESENTED: (1) FOOD REQUIREMENTS FOR MANKIND; (2) FOOD FROM THE LAND; (3) FOOD FROM THE SEA; (4) SELECTIVE BREEDING AND CULTIVATION; (5) FERTILIZERS AND IRRIGATION; (6) PREDATOR AND PEST CONTROL; AND (7) FOOD PROCESSING AND SYNTHESIS. NUMEROUS TABLES AUGMENT THE DISCUSSIONS. THE DOCUMENT IS WRITTEN WITH MINIMUM USE OF TECHNICAL LANGUAGE AND IS INTENDED FOR THE INTERESTED LAYMAN.

AVAILABILITY: TECHNOMIC PUBLISHING COMPANY, INC., 265 POST ROAD, WEST, WESTPORT, CT 06880. PRICE: $5.00

IRIS ACCESSION NUMBER: EW004500

PUBLICATION DATE: 79

TITLE: POLLUTION PREVENTION PAYS.

PERSONAL AUTHOR: ROYSTON, MICHAEL G.

DESCRIPTOR: *AIR POLLUTION CONTROL; COMMUNITY INVOLVEMENT; ECONOMICS; *DECISION MAKING; *ENVIRONMENT; GLOBAL APPROACH; GOVERNMENT ROLE; INDUSTRIES; *INTERNATIONAL PROGRAMS; MANAGEMENT; *POLLUTION; *PUBLIC POLICY; RECYCLING; TECHNOLOGICAL ADVANCEMENT; TECHNOLOGY; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 197P.

ABSTRACT: THIS BOOK DISCUSSES THE EFFICACY OF PROCESS MODIFICATIONS IN INDUSTRY TO REDUCE AND ELIMINATE POLLUTION. THE AUTHOR BELIEVES THIS IS A MORE ECONOMICAL AND RATIONAL APPROACH TO ENVIRONMENTAL PROTECTION THAN SPENDING LARGE AMOUNTS OF CAPITAL TO CLEAN UP POLLUTANTS. IT DISCUSSES THE OPTION OF CONVERTING WASTES TO RESOURCES. TREATED ARE THE SOCIO-POLITICAL FORCES AT WORK WHICH INFLUENCE THE SELECTION OF OPTIONS IN POLLUTION CONTROL, AND MEANS OF REORDERING IMPLEMENTATION OF SELECTED ALTERNATIVES.

AVAILABILITY: PERGAMON PRESS INC., FAIRVIEW PARK, MAXWELL HOUSE, ELSFORD, NY 10523 PRICE: $20.00

IRIS ACCESSION NUMBER: EW004502

PUBLICATION DATE: 74

TITLE: HANDBOOK OF ENVIRONMENTAL MONITORING.

PERSONAL AUTHOR: CROSS, FRANK L.

DESCRIPTOR: *AIR POLLUTION CONTROL; DECISION MAKING; *ENVIRONMENT; *HANDBOOKS; HEALTH; INDUSTRY; *INSTRUMENTATION; *MANAGEMENT; *MEASUREMENT; *MONITORING; *NOISE; *PESTICIDES; *RADIOACTIVITY; *SAMPLING; WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 242P.

ABSTRACT: DISCUSSED IS ENVIRONMENTAL MONITORING TO OBTAIN HARD DATA THAT CAN BE USED TO MAKE DECISIONS IN

ENVIRONMENTAL MANAGEMENT. AREAS ADDRESSED INCLUDE IN-PLANT STUDIES, AMBIENT SAMPLING, AND SOURCE TESTING AND EVALUATION. TOPICS INCLUDE THE MONITORING OF AIR, WATER, AND NOISE POLLUTION; PESTICIDES; INDUSTRIAL HYGIENE SAMPLING, SOLID WASTE MANAGEMENT, AND MEASUREMENT OF RADIOACTIVITY. EMPHASIS IS PLACED UPON THE INSTRUMENTS AND EQUIPMENT USED FOR MONITORING.

AVAILABILITY: TECHNOMIC PUBLISHING COMPANY, INC., 265 POST ROAD, WEST, WESTPORT, CT 06880. PRICE: $25.00

IRIS ACCESSION NUMBER: EW004503

PUBLICATION DATE: 79

TITLE: IMPROVED HYDRAULIC PERFORMANCE OF CHLORINE CONTACT CHAMBERS.

PERSONAL AUTHOR: HART, FREDERICK L.

DESCRIPTOR: *WASTEWATER TREATMENT; WATER POLLUTION CONTROL; TECHNOLOGY; *HYDRAULICS; *CHLORINATION; PUBLIC HEALTH; *DISINFECTION; *EQUIPMENT; *OPERATIONS (WASTEWATER)

DESCRIPTIVE NOTE: 2868-2875P.

ABSTRACT: THIS ARTICLE DISCUSSES A STUDY INVESTIGATING A TECHNIQUE OF REDUCING TOTAL CHLORINE USE BY IMPROVING THE HYDRAULIC CHARACTER OF A STANDARD CHLORINE CONTACT CHAMBER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V51 N12.

IRIS ACCESSION NUMBER: EW004504

PUBLICATION DATE: 80

TITLE: SAFEGUARDS FOR GROUNDWATER.

DESCRIPTOR: ENVIRONMENT; GOVERNMNET ROLE; *GROUNDWATER; MANAGEMENT; *MEASUREMENT; *REGULATION; TECHNOLOGY; WASTE DISPOSAL; WASTES; WASTEWATER; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WELLS

DESCRIPTIVE NOTE: 38-44P.

ABSTRACT: ADDRESSED IS THE STATUS OF GROUNDWATER PROTECTION IN THE UNITED STATES. TOPICS INCLUDE REGULATORY AND TECHNICAL STRATICIES, HAZARDOUS WASTES, DISPOSAL ALTERNATIVES, MANAGEMENT REGULATIONS, THE REGULATION-MAKING PROCESS, ENVIRONMENTAL MONITORING, MONITORING WELLS AND THEIR PROBLEMS, PCB'S, DISPOSAL WELLS, AND SURFACE IMPOUNDMENT.

AVAILABILITY: ENVIRONMENTAL SCIENCE AND TECHNOLOGY; V14 N1.

IRIS ACCESSION NUMBER: EW004505

PUBLICATION DATE: 80

TITLE: THE CONSULTANT'S VIEWPOINT ON ALTERNATIVE DISINFECTANTS.

PERSONAL AUTHOR: TITTLEBAUM, M. L.; AND OTHERS.

DESCRIPTOR: *WASTEWATER TREATMENT; WATER POLLUTION CONTROL; *DISINFECTION; PUBLIC HEALTH; ENVIRONMENTAL INFLUENCES; *OPERATIONS (WASTEWATER); TECHNOLOGY; *DECISION MAKING; UTILITIES; MANAGEMENT

DESCRIPTIVE NOTE: 40-41P.

ABSTRACT: THIS ARTICLE PRESENTS A DECISION-MAKING MODEL WHICH CAN BE EMPLOYED WHEN CONSIDERING ALTERNATIVES TO CHLORINATION FOR THE DISINFECTION OF WASTEWATER.

AVAILABILITY: PUBLIC WORKS; V3 N1

IRIS ACCESSION NUMBER: EW004506

PUBLICATION DATE: 79

TITLE: REGIONALIZATION OF WATER UTILITIES: NEEDS AND ISSUES.

DESCRIPTOR: *REGIONAL PLANNING; *UTILITIES; *WATER SUPPLY; *MANAGEMENT; COST EFFECTIVENESS; *GUIDELINES; LEGISLATION; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 698-701P.

ABSTRACT: THIS ARTICLE PRESENTS THE FINDINGS OF AN AWWA COMMITTEE INVESTIGATING THE ASSOCIATIONS ROLE IN SUPPORTING OR DEVELOPING PROGRAMS RELATED TO THE REGIONALIZATION OF WATER SUPPLY UTILITIES. MAJOR PROBLEMS AND BENEFITS ARE DISCUSSED. THE ARTICLE ENDS WITH A SUGGESTED AWWA POLICY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N12.

IRIS ACCESSION NUMBER: EW004507

PUBLICATION DATE: 79

TITLE: REGIONALIZATION OF WATER UTILITIES: A SURVEY.

DESCRIPTOR: *QUESTIONNAIRES; *WATER SUPPLY; *UTILITIES; *REGIONALIZATION; *RESEARCH; MUNICIPALITIES; MANAGEMENT; ENVIRONMENTAL INFLUENCES

DESCRIPTIVE NOTE: 702-707P.

ABSTRACT: THIS ARTICLE REPORTS THE RESULTS OF A SURVEY BY THE AWWA TO DETERMINE THE PROFESSIONS VIEWPOINTS CONCERNING REGIONALIZATION OF WATER UTILITIES. A COPY OF THE SURVEY INSTRUMENT AND RESULTS ARE INCLUDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N12.

IRIS ACCESSION NUMBER: EW004508

PUBLICATION DATE: 79

TITLE: EVALUATING HOME PLUMBING CORROSION PROBLEMS.

PERSONAL AUTHOR: HOYT, BRIAN P.; AND OTHERS.

DESCRIPTOR: *PLUMBING; *WATER SUPPLY; *UTILITIES; *CORROSION; *WATER QUALITY; *CHEMICAL ANALYSIS; *RESEARCH; ENVIRONMENTAL INFLUENCES; ENGINEERING; MANAGEMENT

DESCRIPTIVE NOTE: 720-725P.

ABSTRACT: THIS ARTICLE DESCRIBES THE STUDY UNDERTAKEN BY THE SEATTLE WATER DISTRICT TO CONTROL CORROSION OF HOME PLUMBING SYSTEMS. AREAS REVIEWED INCLUDE: CORROSION RATE TESTING, FIELD EXAMINATIONS, RESIDENCE MONITORING, DEVELOPMENT OF A CONTROL PLAN, AND A NEW WATER QUALITY MONITORING PROGRAM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N12.

IRIS ACCESSION NUMBER: EW004509

PUBLICATION DATE: 79

TITLE: VELOCITY GRADIENTS IN GRANULAR FILTER BACKWASHING.

PERSONAL AUTHOR: VALENCIA, JORGE ARBOLEDA; CLEASBY, JOHN L.

DESCRIPTOR: *WATER TREATMENT; *OPERATIONS (WATER); EQUIPMENT; MAINTENANCE; *FILTRATION; ENGINEERING; *RESEARCH; *BACKWASHING

DESCRIPTIVE NOTE: 732-738P.

ABSTRACT: THIS PAPER EXPANDS AND COMPLEMENTS THE THEORETICAL ASPECTS OF BACKWASHING GRANULAR FILTER BEDS. THE APPLICATION OF DIFFERENT VELOCITY GRADIENTS ARE DISCUSSED AS TO THEIR EFFECTIVENESS ON THE CLEANING PROCESS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V71 N12.

IRIS ACCESSION NUMBER: EW004514

PUBLICATION DATE: 78

TITLE: DEVELOPMENTS IN BIODEGRADATION OF HYDROCARBONS-1.

PERSONAL AUTHOR: WATKINSON, R. J., EDITOR.

DESCRIPTOR: BIOCHEMISTRY; *BIODEGRADATION; *CHEMICAL REACTIONS; *ENVIRONMENT; GENETICS; *HYDROCARBONS; INDUSTRY; MARINE ENVIRONMENT; *MICROBIOLOGY; OIL; *ORGANIC CHEMISTRY; PETROLEUM INDUSTRY; *RESEARCH; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 229P.

ABSTRACT: DISCUSSED ARE THE INVESTIGATION AND ADVANCEMENTS MADE IN THE BIODEGRADATION OF HYDROCARBONS AND OILS. DESIGNED FOR THE RESEARCH WORKER AND THOSE INVOLVED IN PROCESSES IN WHICH MICROBIAL INTERACTIONS WITH HYDROCARBONS MAY TAKE PLACE, THE DOCUMENT PROVIDES INFORMATION ON THE DEGRADATION OF ALIPHATIC HYDROCARBONS, MICROBIAL DEGRADATION OF ALICYCLIC AND AROMATIC HYDROCARBONS, METABOLISM AND ENVIRONMENTAL ASPECTS OF POLYCYCLIC AROMATIC HYDROCARBONS, MICROBIAL GENETICS RELATING TO HYDROCARBON DEGRADATION, DEGRADATION OF OIL IN THE MARINE ENVIRONMENT, AND BIODEGRADATION OF HYDROCARBON-BASED PRODUCTS IN INDUSTRIAL USE.

AVAILABILITY: UPDATE PUBLISHING INTERNATIONAL, INC., 44 ENGLE STREET, ENGLEWOOD, NJ 07631. PRICE: $34.00

IRIS ACCESSION NUMBER: EW004515

PUBLICATION DATE: 77

TITLE: TOPICS IN.... CHEMICAL INSTRUMENTATION-II.

PERSONAL AUTHOR: EWING, HALEN W. ED.

DESCRIPTOR: *CHEMICAL ANALYSIS; *CHEMISTRY; CHROMATOGRAPHY; *EQUIPMENT; *INSTRUMENTATION; LABORATORY TECHNIQUES; *MEASUREMENT; *JOURNAL OF CHEMICAL EDUCATION; PERIODICALS; REPRINTS; SPECTROSCOPY; *TECHNOLOGY.

DESCRIPTIVE NOTE: 310P.

ABSTRACT: REPRINTED IN THIS VOLUME ARE 36 ARTICLES FROM THE "TOPICS IN CHEMICAL INSTRUMENTATION" COLUMNS IN THE JOURNAL OF CHEMICAL EDUCATION FROM JANUARY 1970 THROUGH NOVEMBER 1975. THE ARTICLES HAVE BEEN ORDERED BY SUBJECT MATTER. TOPICS INCLUDE ATOMIC SPECTROSCOPY ATOMIZATION SYSTEMS, NMR SPECTROMETERS, INFRARED DETECTORS, ELECTRON SPECTROSCOPY, THERMAL ANALYSIS TECHNIQUES, GEL PERMEATION AND THIN LAYER CHROMATOGRAPHY, NUCLEAR RADIATION DETECTORS, AND LABORATORY AUTOMATION.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, 1155 SIXTEENTH ST., N.W., WASHINGTON, D.C. 20036 PRICE: $12.00

IRIS ACCESSION NUMBER: EW004516

PUBLICATION DATE: 75

TITLE: CHEMICAL TECHNOLOGY HANDBOOK.

PERSONAL AUTHOR: PEESOK, ROBERT L.; AND OTHERS.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMISTRY; *HANDBOOKS; HAZARDS; *LABORATORIES; *LABORATORY PROCEDURES;

PARAPROFESSIONAL PERSONNEL; RECORD KEEPING; *REFERENCE MATERIALS; *SAFETY; SCIENTIFIC PERSONNEL; *TECHNOLOGY.

DESCRIPTIVE NOTE: 215P.

ABSTRACT: COMPILED IN THIS 10 CHAPTER REFERENCE IS INFORMATION ON ALL ASPECTS OF LABORATORY WORK. COVERED ARE FIRST AID, GOOD PRACTICES IN THE CHEMISTRY LABORATORY, PERSONAL PROTECTIVE EQUIPMENT, FIRE SAFETY, TOXIC CHEMICALS, SPECIAL HAZARDS, RADIATION HAZARDS, ELECTRICAL HAZARDS, COMPRESSED GASES, LABORATORY NOTEBOOKS, AIDS FOR CALCULATIONS, USE AND INTERPRETATION OF DATA, DRAWINGS AND DIAGRAMS, LABORATORY TOOLS AND EQUIPMENT, SPECIFICATIONS TESTING, AND CHEMICAL LITERATURE AND THE LIBRARY.

AVAILABILITY: AMERICAN CHEMICAL SOCIETY, 1155 16TH STREET, NW, WASHINGTON, D.C. 20036. PRICE: $15.00

IRIS ACCESSION NUMBER: EW004517

PUBLICATION DATE: 75

TITLE: MOTIVATING FOR INCREASED PRODUCTIVITY.

DESCRIPTOR: *AUDIO-VISUAL AIDS; BEHAVIOR THEORIES; *INSTRUCTIONAL MATERIALS; INSTRUCTION; JOB SKILLS; MANAGEMENT; *MOTIVATION; *PRODUCTIVITY (WORKER); *PSYCHOLOGY; *SUPERVISION; *TRAINING; WORK ENVIRONMENT.

DESCRIPTIVE NOTE: 6P. AUDIOTAPE CASSETTES, 20 MINUTES LISTENING SESSIONS.

ABSTRACT: ELEVEN UNITS ON MOTIVATION IN THE WORK ENVIRONMENT ARE PRESENTED IN THIS PACKET OF CASSETTE TAPES AND WORKBOOK. SITUATIONS ARE PRESENTED AND THEN ADDRESSED FROM VARIOUS POINTS OF VIEW TO HELP INDIVIDUALS STRENGTHEN THEIR MANAGERIAL SKILLS AND INCREASE AWARENESS OF PROBLEMS OF MOTIVATING SUBORDINATES. THIS SELF-PACED PROGRAM COVERS SUCH AREAS AS: PRINCIPLES OF MOTIVATION; MANAGING THE PSYCHOLOGICAL CONTRACT; MOTIVATING THROUGH TRAINING; AND FOSTERING SAFE ATTITUDES AND PERFORMANCE.

AVAILABILITY: AWWA, 6666 W QUINCY AVE, DENVER CO 80235. RENTAL PRICE: $5.00.

INSTITUTION NAME: AMERICAN MANAGEMENT ASSOCIATION.

IRIS ACCESSION NUMBER: EW004518

PUBLICATION DATE: 74

TITLE: APPLEY IN ACTION.

DESCRIPTOR: *AUDIO-VISUAL AIDS; EMPLOYER-EMPLOYEE RELATIONSHIP; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *MANAGEMENT; *MOTIVATION; *PROFESSIONAL DEVELOPMENT; *SUPERVISION; TRAINING; *WORK ENVIRONMENT.

DESCRIPTIVE NOTE: 3P. AUDIOTAPE CASSETTES, 40 MIN. LISTENING SESSIONS.

ABSTRACT: THIS PACKET OF THREE CASSETTE TAPES DISCUSSES THE ROLES AND RESPONSIBILITIES OF INDIVIDUALS FUNCTIONING IN MANAGEMENT POSITIONS. TOPICS DISCUSSED INCLUDE: MANAGEMENT AS A PROFESSION; IDENTIFYING AN ENLIGHTENED MANAGER; THE INGREDIENTS OF GOOD MANAGEMENT; AND THE TEN COMMANDMENTS OF MANAGEMENT. EACH OF THE TOPIC AREAS IS SUMMARIZED IN AN ACCOMPANYING PAMPHLET.

AVAILABILITY: AWWA, 6666 W QUINCY, DENVER, CO 80235. RENTAL FEE: $4.00.

INSTITUTION NAME: AMERICAN MANAGEMENT ASSOCIATION.

IRIS ACCESSION NUMBER: EW004519

PUBLICATION DATE: 75

TITLE: BENNIS ON LEADERS.

DESCRIPTOR: AUDIO-VISUAL AIDS; DECISION-MAKING; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *LEADERSHIP; *MANAGEMENT; *PSYCHOLOGY; *SUPERVISION; *WORK ENVIRONMENT.

DESCRIPTIVE NOTE: 5P. AUDIOTAPE CASSETTES, 45 MINUTE LISTENING SESSIONS AND TWO BOOKLETS.

ABSTRACT: THIS PROGRAM OF FIVE CASSETTES DISCUSSES THE ROLES AND RESPONSIBILITIES OF INDIVIDUALS FUNCTIONING IN A LEADERSHIP CAPACITY. TOPICS ADDRESSED INCLUDE: LEADERS, AN ENDANGERED SPECIES; LEADER'S OVERLOAD; THE INCESSANT ENVIRONMENT; LEADERSHIP REQUIREMENTS; AND THE PERSONAL SIDE OF LEADERSHIP. EACH OF THE CASSETTES IS SUMMARIZED IN AN ACCOMPANYING PAMPHLET.

AVAILABILITY: AWWA, 6666 W QUINCY, DENVER, CO. 80235. RENTAL FEE: $6.00

INSTITUTION NAME: AMERICAN MANAGEMENT ASSOCIATION.

IRIS ACCESSION NUMBER: EW004520

PUBLICATION DATE: 73

TITLE: SUPERVISORY EFFECTIVENESS.

DESCRIPTOR: *AUDIO-VISUAL AIDS; *COMMUNICATION SKILLS; *EMPLOYER-EMPLOYEE RELATIONSHIPS; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *MANAGEMENT; PLANNING; *SUPERVISION; TRAINING; WORK ENVIRONMENT

DESCRIPTIVE NOTE: 6 AUDIOTAPE CASSETTES, 60 MINUTE LISTENING SESSION.

ABSTRACT: THIS PROGRAM CONTAINS SIX CASSETTE TAPES DESIGNED TO HELP SUPERVISORS AND MANAGERS INCREASE THEIR EFFECTIVENESS IN DEALING WITH EMPLOYEES. TOPICS ADDRESSED INCLUDE: WORKING WITH OTHERS; PLANNING AND ORGANIZING WORK; COMMUNICATION (NON VERBAL); COMMUNICATING WITH SUBORDINATES; AND GROUP MANAGEMENT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, 6666 W QUINCY, DENVER, CO 80235 RENTAL FEE: $5.00.

INSTITUTION NAME: AMERICAN MANAGEMENT ASSOCIATION.

IRIS ACCESSION NUMBER: EW004521

PUBLICATION DATE: 74

TITLE: DRUCKER ON MANAGEMENT.

DESCRIPTOR: *AUDIOVISUAL AIDS; ADMINISTRATION; *EMPLOYER-EMPLOYEE RELATIONSHIPS; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; *MANAGEMENT; *PROFESSIONAL DEVELOPMENT; PRODUCTIVITY (WORKER); SOCIAL RESPONSIBILITIES; *SUPERVISION; TRAINING; *WORK ENVIRONMENT.

DESCRIPTIVE NOTE: 8 AUDIOTAPE CASSETTES, 45 MINUTE LISTENING SESSIONS.

ABSTRACT: THIS PACKET OF EIGHT CASSETTES DISCUSSES THE LEADERSHIP RESPONSIBILITIES OF INDIVIDUALS IN MANAGEMENT POSITIONS. TOPICS ADDRESSED INCLUDE: GOAL SETTING; MANAGING DIVERSITY; SOCIAL IMPACTS AND SOCIAL RESPONSIBILITIES; ORGANIZATION STRUCTURE IN TRANSITION; THE MANAGER AND THE WORKER; AND THE LITERATE MANAGER.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, 6666 W QUINCY, DENVER, CO 80235 RENTAL- $8.00.

INSTITUTION NAME: AMERICAN MANAGEMENT ASSOCIATION.

IRIS ACCESSION NUMBER: EW004522

PUBLICATION DATE: DEC 78

TITLE: THERMAL EFFECTS ON AQUATIC ORGANISMS-AN ANNOTATED BIBLIOGRAPHY OF THE 1977 LITERATURE.

PERSONAL AUTHOR: TALMAGE, SYLVIA S.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *AQUATIC ENVIRONMENT; BIOLOGY; *ENERGY; ESTUARIES; FIELD STUDIES; *HEAT; *RESEARCH; *TEMPERATURE; THERMAL ENVIRONMENT; *UTILITIES; *WATER POLLUTION CONTROL; WATER RESOURCES; ZOOLOGY.

DESCRIPTIVE NOTE: 179P.

ABSTRACT: LISTED ARE 537 REFERENCES FROM THE 1977 LITERATURE IN THIS SEVENTH IN A SERIES OF ANNOTATED BIBLIOGRAPHIES OF THE EFFECTS OF HEAT ON AQUATIC ORGANISMS. THE EFFECTS OF THERMAL DISCHARGES AT POWER PLANT SITES ARE EMPHASIZED. LABORATORY AND FIELD STUDIES ON TEMPERATURE TOLERANCE AND THE EFFECTS OF TEMPERATURE CHANGES ON REPRODUCTION, DEVELOPMENT, GROWTH, DISTRIBUTION, PHYSIOLOGY, AND SENSITIVITY TO OTHER STRESSES ARE INCLUDED. REFERENCES ARE DIVIDED INTO THREE SUBJECT CATEGORIES: MARINE SYSTEMS, FRESHWATER SYSTEMS, AND ESTUARIES. THE REFERENCES ARE ARRANGED ALPHABETICALLY BY FIRST AUTHOR. INDEXES ARE PROVIDED FOR AUTHOR, KEYWORDS, SUBJECT CATEGORY, GEOGRAPHIC LOCATION OF THE STUDY, TAXON, AND TITLE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.00 PRINTED COPY-$3.00 MICROFICHE.

IRIS ACCESSION NUMBER: EW004523

PUBLICATION DATE: FEB 78

TITLE: PHOSPHORUS INTERACTIONS IN THE AQUATIC ENVIRONMENT-A SURVEY OF THE LITERATURE.

PERSONAL AUTHOR: MEALS, JR., DONALD W.; CASSELL, E. ALAN.

DESCRIPTOR: CHEMICAL ANALYSIS; *ENVIRONMENT; EUTROPHICATION; HYDROLOGY; *LAKES; *LAKE CHAMPLAIN BASIN STUDY; *MANAGEMENT; *PHOSPHOROUS; PLANNING; *RESEARCH; *STATE-OF-THE-ART-REVIEWS; *WATER POLLUTION CONTROL; WATER QUALITY; *WATER RESOURCES.

DESCRIPTIVE NOTE: 103P.

ABSTRACT: BASED ON A SURVEY OF THE SCIENTIFIC LITERATURE, THIS REPORT PRESENTS A SUMMARY OF THE MAJOR FEATURES OF PHOSPHOROUS INTERACTIONS IN STREAMS, WETLANDS, AND LAKE SEDIMENTS. DATA AND INFORMATION PRESENTED WERE DERIVED ALMOST ENTIRELY FROM AQUATIC SYSTEMS OTHER THAN THE LAKE CHAMPLAIN BASIN. THEREFORE THE CONCLUSIONS OF THIS REPORT FOCUS ON THOSE PRINCIPLES TO HELP FORMULATE MANAGEMENT STRATEGIES AND GUIDE FUTURE RESEARCH IN THE LAKE CHAMPLAIN BASIN.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.50.

IRIS ACCESSION NUMBER: EW004524

PUBLICATION DATE: 78

TITLE: PROCEEDINGS OF UNIVERSITY SEMINAR ON POLLUTION AND WATER RESOURCES. VOLUME IX 1975-1978.

PERSONAL AUTHOR: HALASI-KUN, GEORGE J.; WIDMER, KEMBLE, EDITORS.

DESCRIPTOR: CONFERENCE REPORTS; DATA COLLECTION; *GLOBAL APPROACH; LAND USE; *OCEANOLOGY; PLANNING; *POLLUTION; *SALINE WATER; *SEMINARS; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 150P.

ABSTRACT: PRESENTED IS A COMPILATION OF 10 PAPERS FROM THE THREE YEAR COLUMBIA UNIVERSITY SEMINAR ON POLLUTION AND WATER RESOURCES. CONCENTRATING ON THE INTERNATIONAL AND INTERSTATE ASPECT OF THE WATER RESOURCES PROBLEM, THIS VOLUME EMPHASIZES OCEANOGRAPHY, SALINE WATER, WATER RESOURCES DATA COLLECTING, AND POLLUTION PROBLEMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.00

IRIS ACCESSION NUMBER: EW004525

PUBLICATION DATE: 78

TITLE: PROCEEDINGS OF UNIVERSITY SEMINAR ON POLLUTION AND WATER RESOURCES. VOLUME XI 1975-1978.

PERSONAL AUTHOR: HALASI-KUN, GEORGE J.; WIDMER, KEMBLE.

DESCRIPTOR: CONFERENCE REPORTS; *GLOBAL APPROACH; HYDROLOGY; INSTRUMENTATION; OCEANOLOGY; PLANNING; POLICY FORMATION; *POLLUTION; *RESEARCH; *SEMINARS; *WATER POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES.

DESCRIPTIVE NOTE: 156P.

ABSTRACT: PRESENTED IS A COMPILATION OF 10 PAPERS FROM THE THREE YEAR COLUMBIA UNIVERSITY SEMINAR ON POLLUTION AND WATER RESOURCES. CONCENTRATING ON THE INTERNATIONAL AND INTERSTATE ASPECTS OF THE WATER RESOURCES PROBLEM, THIS VOLUME EMPHASIZES WATER POLLUTION PROBLEMS, WATER QUALITY, AND RESEARCH IN WATER RESOURCES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.50.

IRIS ACCESSION NUMBER: EW004526

PUBLICATION DATE: FEB 79

TITLE: INTERACTIVE MULTIPLE OBJECTIVE OPTIMIZATION.

PERSONAL AUTHOR: MUSSELMAN, KENNETH J.; TALAVAGE, JOSEPH J.

DESCRIPTOR: *CITY PROBLEMS; *DECISION MAKING; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; EVALUATION METHODS; *INFORMATION PROCESSING; LAND USE; MATHEMATICS; *PLANNING; WATER POLLUTION CONTROL; *WATER RESOURCES.

DESCRIPTIVE NOTE: 194P.

ABSTRACT: DECISION PROBLEMS OFTEN ARISE WHEN SEVERAL NON-COMMENSURATE AND CONFLICTING OBJECTIVES MUST BE CONSIDERED SIMULTANEOUSLY. THIS REPORT IS CONCERNED WITH FIRST INVESTIGATING A GENERAL NONLINEAR CLASS OF THESE PROBLEMS AND THEN DEVELOPING A MEANS OF SOLVING PROBLEMS FOUND IN THIS CLASS. THE RESULTS OF THIS RESEARCH ARE DIVIDED INTO FOUR RELATED AREAS: (1) IDENTIFICATION OF PROPERTIES; (2) DEVELOPING A USER-ORIENTED ALGORITHM USING THE IDENTIFIED PROPERTIES TO SOLVE NONLINEAR MULTIPLE OBJECTIVE OPTIMIZATION PROBLEMS; (3) APPLYING THE ALGORITHM TO A REPRESENTATIVE PROBLEM; AND (4) MODIFYING THE ALGORITHM TO ADDRESS DISCRETE NONLINEAR MULTIPLE OBJECTIVE OPTIMIZATION PROBLEMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $6.50

IRIS ACCESSION NUMBER: EW004527

PUBLICATION DATE: APR 78

TITLE: THE LEGISLATIVE AND INSTITUTIONAL FRAMEWORK TO CONTROL POLLUTION FROM LAND USE ACTIVITIES IN THE UNITED STATES GREAT LAKES BASIN; SUMMARY REPORT.

PERSONAL AUTHOR: SCHWEITZER, ERIC; AND OTHERS.

DESCRIPTOR: ECOLOGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *GREAT LAKES; INTERNATIONAL LAW; *INTERNATIONAL PROGRAMS; INTERNATIONAL RELATIONS; *LAND USE; NATURAL RESOURCES; POLLUTION; *REGIONAL PLANNING; STATE LEGISLATION; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 56P.

ABSTRACT: THE DOCUMENT PRESENTS A SUMMARY DESCRIPTION OF THE EXISTING LEGISLATION/REGULATION FRAMEWORK AVAILABLE AT VARIOUS LEVELS OF GOVERNMENTS IN THE UNITED STATES GREAT LAKES BASIN FOR CONTROLLING THE NONPOINT DISCHARGES OF SEDIMENTS, NUTRIENTS, PESTICIDES, AND CHEMICALS ASSOCIATED WITH URBAN AREAS, TRANSPORTATION CORRIDORS, EXTRACTIVE OPERATIONS, AGRICULTURE, RECREATIONAL AREAS, FORESTED AREAS, LIQUID, SOLID AND DEEPWELL DISPOSAL AREAS, SHORELINE LANDFILLING ACTIVITIES, AND LAKESHORE AND RIVERBANK EROSION. BRIEF SUMMARIZED INFORMATION IN THIS VOLUME IS DETAILED IN A THREE VOLUME SET UNDER THE SAME TITLE (EW004 529; 004 530; 004531).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $9.50

IRIS ACCESSION NUMBER: EW004529

PUBLICATION DATE: APR 78

TITLE: THE LEGISLATIVE AND INSTITUTIONAL FRAMEWORK TO CONTROL POLLUTION FROM LAND USE ACTIVITIES IN THE UNITED STATES GREAT LAKES BASIN-VOLUME I-SUMMARY REPORT, A COMPARATIVE ANALYSIS AND FEDERAL FRAMEWORK.

PERSONAL AUTHOR: SCHWEITZER, ERIC; AND OTHERS.

DESCRIPTOR: ECOLOGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *GREAT LAKES; INTERNATIONAL LAW; *INTERNATIONAL PROGRAMS; INTERNATIONAL RELATIONS; *LAND USE; NATURAL RESOURCES; POLLUTION; *REGIONAL PLANNING; STATE LEGISLATION; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WATER RESOURCES.

DESCRIPTIVE NOTE: 109P.

ABSTRACT: THIS FIRST VOLUME OF THREE SUMMARIZES THE ANALYSIS COMPLETED IN THE SUBSEQUENT TWO VOLUMES OF A STUDY OF LEGISLATIVE AND REGULATIONS FRAMEWORKS AVAILABLE IN EIGHT U.S. GREAT LAKES STATES RELATIVE TO THE GREAT LAKE WATER QUALITY AGREEMENT SIGNED BY CANADA AND THE U.S. THIS VOLUME

SUMMARIZES REPORTS ON THE CONTROLS AVAILABLE IN LAND USE CONTROL RELATIVE TO WATER QUALITY, THE FEDERAL REGULATORY FRAMEWORK, AND A COMPARISON OF THE CONTROLS AMONG STATES. THE READER IS REFERRED TO THE INDIVIDUAL REPORTS FOR DETAILS. RELATED DOCUMENTS: EW 004530 AND EW 004531.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $9.50

IRIS ACCESSION NUMBER: EW004530

PUBLICATION DATE: NOV 77

TITLE: THE LEGISLATIVE AND INSTITUTIONAL FRAMEWORK TO CONTROL POLLUTION FROM LAND USE ACTIVITIES IN THE UNITED STATES GREAT LAKES BASIN-VOLUME II-STATES OF ILLINOIS, INDIANA, MICHIGAN AND MINNESOTA.

PERSONAL AUTHOR: SCHWEITZER ERIC; ROTH, BARBARA.

DESCRIPTOR: ECOLOGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *GREAT LAKES; INTERNATIONAL LAW; *INTERNATIONAL PROGRAMS; INTERNATIONAL RELATIONS; *LAND USE; NATURAL RESOURCES; POLLUTION; *REGIONAL PLANNING; STATE LEGISLATION; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 90P.

ABSTRACT: THIS STUDY ADDRESSES THE REVIEW AND EVALUATION OF THE EXISTING LEGISLATIVE AND REGULATORY FRAMEWORK AVAILABLE WITHIN THE PURVIEW OF GREAT LAKES WATER QUALITY AGREEMENT SIGNED BY CANADA AND THE UNITED STATES. SPECIFICALLY EXAMINED ARE LEGISLATION AND REGULATIONS DEALING WITH POLLUTION FROM LAND USE ACTIVITIES. THE REPORT IS DIVIDED INTO TWO SECTIONS: (1) PROBLEMS, CURRENT ACTIVITY, EVALUATION; AND (2) SUMMARIES OF LEGISLATION. THIS SECOND VOLUME OF THREE EXAMINES LEGISLATION AND REGULATION PECULIAR TO THE STATES OF ILLINOIS, INDIANA, MICHIGAN, AND MINNESOTA. RELATED DOCUMENTS: EW 004531 AND EW 004529.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $12.50

IRIS ACCESSION NUMBER: EW004531

PUBLICATION DATE: NOV 77

TITLE: THE LEGISLATIVE AND INSTITUTIONAL FRAMEWORK TO CONTROL POLLUTION FROM LAND USE ACTIVITIES IN THE UNITED STATES GREAT LAKES BASIN-VOLUME III-STATES OF NEW YORK, OHIO, PENNSYLVANIA AND WISCONSIN.

PERSONAL AUTHOR: SCHWEITZER, ERIC; ROTH, BARBARA.

DESCRIPTOR: ECOLOGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; INTERNATIONAL LAW; *INTERNATIONAL PROGRAMS; INTERNATIONAL RELATIONS; *LAND USE; NATURAL RESOURCES; POLLUTION; *REGIONAL PLANNING; STATE LEGISLATION; WASTE DISPOSAL; *WATER POLLUTION CONTROL; *WATER RESOURCES.

DESCRIPTIVE NOTE: 117P.

ABSTRACT: THIS STUDY ADDRESSES THE REVIEW AND EVALUATION OF EXISTING LEGISLATIVE AND REGLATORY FRAMEWORK AVAILABLE WITHIN THE PURVIEW OF THE GREAT LAKES WATER QUALITY AGREEMENT SIGNED BY CANADA AND THE UNITED STATES. SPECIFICALLY EXAMINED ARE LEGISLATION AND REGULATIONS DEALING WITH POLLUTION FROM LAND USE ACTIVITIES. THE REPORT IS DIVIDED INTO TWO SECTIONS: (1) PROBLEMS, CURRENT ACTIVITY, EVALUATION; AND (2) SUMMARIES OF LEGISLATION. A BIBLIOGRAPHY IS PROVIDED. THIS THIRD VOLUME OF THREE EXAMINES LEGISLATION AND REGULATION PECULIAR TO THE STATES OF NEW YORK, OHIO, PENNSYLVANIA, AND WISCONSIN. RELATED DOCUMENTS: EW 004529 AND EW 004530.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $13.25.

IRIS ACCESSION NUMBER: EW004533

PUBLICATION DATE: 79

TITLE: PUBLICATIONS ON TOXIC SUBSTANCES: A DESCRIPTIVE LISTING.

DESCRIPTOR: *BIBLIOGRAPHIES; CHEMISTRY; *CONSUMER PROTECTION; ENVIRONMENTAL INFLUENCES; GOVERNEMNT AGENCIES; *GOVERNMENT PUBLICATIONS; PUBLIC HEALTH; *SAFETY; STANDARDS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 96P. STOCK NUMBER 052-011-00226-7

ABSTRACT: PRESENTED ARE BASIC FACTS ABOUT TOXIC SUBSTANCES AND DESCRIPTIONS OF PUBLICATIONS ABOUT THEM THAT ARE AVAILABLE FROM THE FOOD AND DRUG ADMINISTRATION, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, THE ENVIRONMENTAL PROTECTION AGENCY, OR THE CONSUMER PRODUCT SAFETY COMMISSION. THE PUBLICATIONS DISCUSS TOXIC SUBSTANCES AND PRODUCTS COMMONLY FOUND IN THE HOME, THE WORKPLACE, AGRICULTURE, AND THE ENVIRONMENT. SAFETY IS EMPHASIZED.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402

INSTITUTION NAME: INTERAGENCY REGULATORY LIAISON GROUP.

IRIS ACCESSION NUMBER: EW004537

PUBLICATION DATE: 80

TITLE: SEWER GROUTS AND HOW TO USE THEM.

DESCRIPTOR: COSTS; *GROUTS (SEWER); INFILTRATION; *PIPES; PUBLIC HEALTH; SAFETY; *SEWERS; *TECHNOLOGY; UTILITIES; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 39-41P.

ABSTRACT: DESCRIBED ARE TWO TYPES OF CHEMICAL GROUT, ACRYLAMIDE AND ELASTOMERIC, FOR INTERNALLY SEALING SEWER

PIPE FRACTURES. APPLICATION PROCEDURES, COSTS, AND SAFETY FACTORS ARE DETAILED.

AVAILABILITY: AMERICAN CITY AND COUNTY; V95 N1.

IRIS ACCESSION NUMBER: EW004538

PUBLICATION DATE: 80

TITLE: CROSS-CONNECTION CONTROL MEANS POTABLE WATER SAFETY.

DESCRIPTOR: *BACKFLOW; EPIDEMIOLOGY; EQUIPMENT; *GUIDELINES; *OPERATIONS (DRINKING WATER); *MAINTENANCE; *PROGRAM DESCRIPTIONS; TECHNOLOGY; *UTILITIES; *WATER POLLUTION CONTROL; *WATER SUPPLY; *WATER DISTRIBUTION; *DRINKING WATER

DESCRIPTIVE NOTE: 61-62P.

ABSTRACT: PRESENTED ARE PROCEDURES AND GUIDELINES FOR THE IMPLEMENTATION OF AN ENFORCEABLE CROSS-CONNECTION CONTROL PROGRAM. APPROVED BACKFLOW PREVENTION DEVICES ARE LISTED. PROGRAMS FROM HENRICO COUNTY, VIRGINIA AND CLEVELAND, OHIO ARE DESCRIBED.

AVAILABILITY: AMERICAN CITY AND COUNTY; V95 N1.

IRIS ACCESSION NUMBER: EW004539

PUBLICATION DATE: 80

TITLE: MINIMIZING PRESTRESSED CONCRETE TANK MAINTENANCE. PART 1.

PERSONAL AUTHOR: CROWLEY, FRANCIS X.

DESCRIPTOR: *CONCRETE TANKS; *CONSTRUCTION; *DESIGN; *GUIDELINES; *MAINTENANCE; OPERATIONS (DRINKING WATER); *TANKS (CIRCULAR); WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 28 8 60P.

ABSTRACT: DESCRIBED ARE COMMONLY OCCURRING PERFORMANCE AND DESIGN PROBLEMS ASSOCIATED WITH CIRCULAR, PRESTRESSED, CONCRETE TANKS. CONSTRUCTION PROCEDURES AND TECHNIQUES TO AVOID THESE PROBLEMS ARE DETAILED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1.

IRIS ACCESSION NUMBER: EW004540

PUBLICATION DATE: 80

TITLE: TREATMENT RESTORES ACID WATER.

PERSONAL AUTHOR: BARR, DAVID.

DESCRIPTOR: *FACILITIES; *MUNICIPALITIES; OPERATIONS (WATER TREATMENT); TECHNOLOGY; *UTILITIES; *ACID MINE DRAINAGE; *PENNSYLVANIA; WATER POLLUTION CONTROL; *WATER RESOURCES; *WATER TREATMENT

DESCRIPTIVE NOTE: 29P.

ABSTRACT: DESCRIBED ARE THE OPERATION AND TREATMENTS PROVIDED BY THE ACID MINE DRAINAGE TREATMENT FACILITY IN ALTOONA, PENNSYLVANIA, WHICH BROUGHT ABOUT RENOVATION OF A MUNICIPAL WATER SUPPLY THAT HAD BEEN DEGRADED BY DRAINAGE FROM ABANDONED COAL MINE OPERATIONS.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1

IRIS ACCESSION NUMBER: EW004541

PUBLICATION DATE: 80

TITLE: FROZEN PIPES: CAUSES AND CURES.

PERSONAL AUTHOR: PESKATOR, HOWARD W.

DESCRIPTOR: ENVIRONMENTAL INFLUENCES; *MUNICIPALITIES; *OPERATIONS (WATER TREATMENT); *PIPES; *ILLINOIS; *SURVEYS; *UTILITIES (WATER); WATER RESOURCES; *WATER SUPPLY; *WATER DISTRIBUTION; *FROZEN PIPES

DESCRIPTIVE NOTE: 36-37P.

ABSTRACT: DISCUSSED ARE THE CAUSES OF FROZEN WATER DISTRIBUTION PIPES AND PROCEDURES FOR THAWING FROZEN PIPES BY THE ELECTRICAL METHOD. TABULAR RESULTS OF A SURVEY OF UTILITIES IN 50 ILLINOIS COMMUNITIES AND THEIR TREATMENT OF FREEZEUPS ARE PRESENTED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1.

IRIS ACCESSION NUMBER: EW004542

PUBLICATION DATE: 80

TITLE: GAC VALUE EXCEEDS EXPECTATION.

PERSONAL AUTHOR: BLANCK, CLARENCE

DESCRIPTOR: *ACTIVATED CARBON; CHEMICAL ANALYSIS; COST EFFECTIVENESS; FACILITIES; *MEASUREMENT; *IOWA; OPERATIONS (WATER TREATMENT); *RESEARCH; *TASTE-AND-ODOR CONTROL; TRIHALOMETHANES; UTILITIES; *WATER TREATMENT

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: PRESENTED ARE THE RESULTS OF RESEARCH CONDUCTED AT THE DAVENPORT, IOWA, WATER TREATMENT FACILITY ON THE ADSORPTIVE CAPACITY OF GRANULAR ACTIVATED CARBON (GAC) FOR TRIHALOMETHANES (THM'S).

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1

IRIS ACCESSION NUMBER: EW004543

PUBLICATION DATE: 80

TITLE: REMOVE HEAVY METALS TWO WAYS.

PERSONAL AUTHOR: LEWANDOWSKI, GORDON A.; ABD-EL-BARY, MAHMOUD F.

DESCRIPTOR: *AGRICULTURE; *HEAVY METALS; *LAND APPLICATION; MUNICIPALITIES; *SLUDGE; *WASTE DISPOSAL; WASTES; *WASTEWATER TREATMENT; OPERATIONS (WASTEWATER)

DESCRIPTIVE NOTE: 44-45P.

ABSTRACT: DISCUSSED ARE TWO POSSIBLE METHODS FOR DEVELOPING WIDESPREAD AGRICULTURAL USE OF MUNICIPAL SLUDGE: THE REMOVAL OF HEAVY METALS AT THE MUNICIPAL TREATMENT PLANT BY PHYSICAL-CHEMICAL MEANS OR TREATING THE SLUDGE PRIOR TO DIGESTION AND THE REMOVAL OF HEAVY METALS AT THE SOURCE BY ACTIVATED-CARBON ADSORPTION, ION-EXCHANGE, CEMENTATION, OR ELECTROLYSIS.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1

IRIS ACCESSION NUMBER: EW004544

PUBLICATION DATE: 80

TITLE: MAKING MAINTENANCE WORK RECORDS WORK.

PERSONAL AUTHOR: HOIST, ARNE M.; PUNTENNEY, JOHN L.

DESCRIPTOR: DATA PROCESSING; EQUIPMENT; *FACILITIES; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PLANNING; WASTEWATER TREATMENT; *RECORDS

DESCRIPTIVE NOTE: 46 8 48P.

ABSTRACT: DISCUSSED ARE THE RECORD KEEPING PROCEDURES, SUCH AS MAINTENANCE REQUESTS (MR'S), PREVENTATIVE MAINTENANCE SCHEDULING, AND MAJOR EQUIPMENT RECORDS, UTILIZED BY THE DENVER SEWAGE DISPOSAL DISTRICT. BENEFITS AND THE USE OF DATA PROCESSING ARE DETAILED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1.

IRIS ACCESSION NUMBER: EW004545

PUBLICATION DATE: 80

TITLE: STARTING AND OPERATING AN OXI-DITCH IN THE COLD.

PERSONAL AUTHOR: SANKS, ROBERT L.; CONNELL, JOHN E.

DESCRIPTOR: *ENVIRONMENTAL INFLUENCES; FACILITIES; *MANAGEMENT; *OPERATIONS (WASTEWATER); *OXIDATION DITCHES; SEWAGE; TECHNOLOGY; *TEMPERATURE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 50-52 8 66P.

ABSTRACT: DETAILED ARE THE START-UP AND OPERATION IN SUB-FREEZING TEMPERATURES OF AN OXIDATION DITCH FACILITY IN COLSTRIP, MONTANA IN 1978. PROBLEMS ENCOUNTERED, SOLUTIONS, AND PROCEDURES USED TO OPTIMIZE PLANT OPERATION ARE DETAILED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1

IRIS ACCESSION NUMBER: EW004546

PUBLICATION DATE: 80

TITLE: FROM SCREENING TO FILTRATION: TREATING THE WATER SUPPLY.

PERSONAL AUTHOR: HUNDAL, H. S.; AND OTHERS.

DESCRIPTOR: *COSTS; *DRINKING WATER; *OCEANS; OPERATIONS (WATER TREATMENT); PUBLIC HEALTH; *PURIFICATION; *DESALINATION; *WATER TREATMENT; TECHNOLOGY; *WATER RESOURCES; *RECYLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 54-55P.

ABSTRACT: DISCUSSED ARE THREE METHODS (FREEZING, ELECTRODIALYSIS, AND REVERSE OSMOSIS) FOR CONVERTING SEAWATER TO FRESHWATER AND THE REUSE OF TREATED SEWAGE EFFLUENT IN AREA REGIONS TO AUGMENT WATER SUPPLIES. TWO FACILITIES UTILIZING THE WASTEWATER REUSE CONCEPT ARE DESCRIBED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N1.

IRIS ACCESSION NUMBER: EW004547

PUBLICATION DATE: 78

TITLE: THE WATERSHED APPROACH TO LAKE MANAGEMENT.

DESCRIPTOR: *AUDIOVISUAL AIDS; EUTROPHICATION; GUIDELINES; *INSTRUCTIONAL MATERIALS; *LAKES; *MANAGEMENT; PLANNING; *POST SECONDARY EDUCATION; WATER POLLUTION CONTROL; *WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: SLIDE/TAPE PRESENTATION.

ABSTRACT: EXAMINED IN THIS SLIDE TAPE ARE THE PROBLEMS ASSOCIATED WITH THE PROPER MANAGEMENT OF LAKES. TOPICS INCLUDE LAKE EUTROPHICATION, PHOSPHOROUS AND PHOSPHATES, WATER POLLUTION FROM DOMESTIC AND INDUSTRIAL SOURCES, TROPHIC LEVELS, AND LAKE STRATIFICATION AND TURNOVER. GUIDELINES FOR PROPER WATER RESOURCE MANAGEMENT ARE INCLUDED.

AVAILABILITY: MICHIGAN STATE UNIVERSITY, 410 AGRICULTURE HALL, EAST LANSING MICHIGAN 48824. ATTENTION: MR. RAY CLARK, $2.00 PRERENTAL FEE.

IRIS ACCESSION NUMBER: EW004548

PUBLICATION DATE: 78

TITLE: QUANTITATIVE TECHNIQUES IN LAKE MANAGEMENT.

DESCRIPTOR: *AUDIOVISUAL AIDS; EUTROPHICATION; *INSTRUCTIONAL MATERIALS; *LAKES; *MANAGEMENT; *MEASUREMENT; *MODELS; *PHOSPHOROUS; PLANNING; *POST SECONDARY EDUCATION; WATER POLLUTION CONTROL; WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: SLIDE/TAPE PRESENTATION.

ABSTRACT: EXAMINED IN THIS SLIDE TAPE ARE WATER QUALITY MANAGEMENT STRATEGIES FOR LAKES AND THE DEVELOPMENT AND SELECTION OF THE APPROPIATE QUANTITATIVE MODEL TO PREDICT FINAL PHOSPHOROUS CONCENTRATION IN A LAKE. TROPHIC STATE MEASUREMENTS AND THE USE OF CARLSON'S TROPHIC STATE INDEX ARE EXPLAINED.

AVAILABILITY: MICHIGAN STATE UNIVERSITY, 410 AGRICULTURE HALL, EAST LANSING, MICHIGAN 48824. ATTENTION: MR. RAY CLARK, $2.00 PRERENTAL FEE.

IRIS ACCESSION NUMBER: EW004549

PUBLICATION DATE: MAR 78

TITLE: WATER TREATMENT UNIT DEVELOPMENT FOR FIELD ARMY MEDICAL FACILITIES-TECHNICAL REPORT.

PERSONAL AUTHOR: LEE, M. K.; AND OTHERS.

DESCRIPTOR: *ARMED FORCES; CLORINATION; DESIGN; *EQUIPMENT; *FACILITIES; *HOSPITALS (FIELD); MANAGEMENT; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *RECYCLING; REUSE; TECHNOLOGY; *DRINKING WATER; *WATER TREATMENT; *WASTEWATER TREATMENT; WATER PROCESSING SYSTEM.

DESCRIPTIVE NOTE: 61P.

ABSTRACT: DESCRIBED IS A PILOT PLANT OF AN INTEGRATED WATER PROCESSING SYSTEM DEVELOPED TO TREAT NONSANITARY WASTEWATERS OF THE U.S. ARMY FIELD HOSPITALS EITHER FOR NONPOTABLE REUSE OR FOR SURFACE DISCHARGE TO THE ENVIRONMENT. THE SYSTEM ALSO PURIFIES NATURAL FRESH AND BRACKISH WATERS FOR POTABLE USE. THE DESIGN, CONFIGURATION, AND OPERATION OF THE WATER TREATMENT UNIT ARE DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $5.25.

IRIS ACCESSION NUMBER: EW004550

PUBLICATION DATE: 79

TITLE: EFFECTS OF LAND USE AND URBANIZATION ON WATER RESOURCES AND WATER QUALITY. VOLUME 2. (A BIBLIOGRAPHY WITH ABSTRACTS)-SEARCH PERIOD 1977-MAY 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; EVALUATION METHODS; *LAND USE; PLANNING; POLLUTION; PUBLIC POLICY; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 122P.

ABSTRACT: GENERAL STUDIES ON THE EFFECTS OF LAND USE AND URBANIZATION ON WATER SUPPLY AND WATER QUALITY ARE PRESENTED. REPORTS ON SPECIFIC LOCALITIES ARE INCLUDED, IF THEY MAY BE APPLIED TO OTHER AREAS. THESE CITATIONS NOT ONLY INCLUDE LOCAL, STATE, AND NATIONAL GOVERNMENT POLICIES AND PLANNING AFFECTING LAND DEVELOPMENT, BUT ALSO BASIC RESEARCH ON THE RELATIONSHIP BETWEEN LAND USE AND WATER QUALITY MANAGEMENT. (THIS UPDATED BIBLOGRAPHY CONTAINS 116 ABSTRACTS, 37 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $26.00.

IRIS ACCESSION NUMBER: EW004551

PUBLICATION DATE: JUN 79

TITLE: PUBLIC OPINION AND SOCIOLOGY OF WATER RESOURCE DEVELOPMENT. A BIBLIOGRAPHY WITH ABSTRACTS. SEARCH PERIOD-1970-MAY 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *CITIZEN PARTICIPATION; NATURAL RESOURCES; *PLANNING; *PUBLIC POLICY; SOCIAL SCIENCES; SURVEYS; *WATER RESOURCES

DESCRIPTIVE NOTE: 216P.

ABSTRACT: THE CITATIONS GIVE INSIGHT INTO THE FEELINGS OF CITIZENS AND OFFICIALS TOWARD WATER RESOURCE PROGRAMS INVOLVING WATER QUALITY MANAGEMENT, RESERVOIRS, IRRIGATION, AND DRINKING WATER. THE EFFECTS OF WATER RESOURCE DEVELOPMENT ON THE SOCIAL CONDITIONS OF A REGION OR A COMMUNITY ARE ALSO PRESENTED. THIS UPDATED BIBLIOGRAPHY CONTAINS 210 ABSTRACTS, 18 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $28.00

IRIS ACCESSION NUMBER: EW004553

PUBLICATION DATE: 79

TITLE: MUNICIPAL WASTEWATER MANAGEMENT. CITIZEN'S GUIDE TO FACILITY PLANNING.

PERSONAL AUTHOR: RASTATTER, CLEM L. (EDITOR)

DESCRIPTOR: *CITIZEN PARTICIPATION; CITY PLANNING; *PLANNING; POLLUTION; *PUBLIC POLICY; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 259P.

ABSTRACT: THIS HANDBOOK, DESIGNED FOR THE "LAY" READER, IS ORGANIZED AROUND A LOGICAL PROGRESSION OF QUESTIONS THAT THE INVOLVED CITIZEN OR LOCAL GOVERNMENTAL OFFICIAL IS LIKELY TO ENCOUNTER IN TRYING TO INFLUENCE THE MUNICIPAL SEWAGE FACILITIES PLANNING PROCESS. THE HANDBOOK REFLECTS THE LATEST FEDERAL REGULATIONS AND POLICIES AS OF JANUARY 1979, AND ASSUMES A LEVEL OF INTEREST THAT IS MORE THAN CASUAL ON THE PART OF THE READER. THIS HANDBOOK MAY BE USED IN CONJUNCTION WITH "MUNICIPAL WASTEWATER MANAGEMENT, PUBLIC INVOLVEMENT ACTIVITIES GUIDE".

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $10.75

IRIS ACCESSION NUMBER: EW004554

PUBLICATION DATE: MAR 79

TITLE: ENVIRONMENTAL PLANNING MANUAL FOR SALINITY MANAGEMENT IN IRRIGATED AGRICULTURE.

DESCRIPTOR: *AGRICULTURE; HYDROLOGY; *IRRIGATION; *MANAGEMENT; *NONPOINT SOURCE POLLUTION; NONPOINT SOURCES; PLANNING; PROGRAM DEVELOPMENT; *REGIONAL PLANNING; *SALINITY; *TECHNOLOGY; *WATER QUALITY

DESCRIPTIVE NOTE: 250P.

ABSTRACT: INTENDED FOR ENVIRONMENTAL PLANNERS, THIS MANUAL PROVIDES A DELINEATION OF THE COMBINATIONS OF TECHNOLOGICAL AND INSTITUTIONAL SOLUTIONS, THE VARIOUS LEVELS OF PLANNING EFFORT, USE OF EXISTING DATA, AND NECESSARY FIELD INVESTIGATIONS WHICH ARE REQUIRED FOR THE DIFFERENT PLANNING LEVELS, METHODS OF DATA ANALYSIS, TECHNOLOGICAL AND SOCIO-ECONOMIC CONSIDERATIONS IN IMPLEMENTING A SALINITY CONTROL PROGRAM. RECOMMENDATIONS FOR FORMULATING AN ACTION PROGRAM ARE INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.50.

IRIS ACCESSION NUMBER: EW004556

PUBLICATION DATE: APR 79

TITLE: WATER RESOURCES AND THE NATION'S WATER SUPPLY; ISSUES AND CONCERNS.

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); FLOODS; GOVERNMENT ROLE; MANAGEMENT; NATURAL RESOURCES; *PLANNING; *PUBLIC POLICY; WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 63P.

ABSTRACT: THE FOCUS OF THIS STUDY IS ON THOSE PROGRAMS AND ACTIVITIES CONCERNING WATER RESOURCES PLANNING, MANAGEMENT, AND DEVELOPMENT DESIGNED TO PROVIDE ADEQUATE WATER SUPPLIES TO MEET PRESENT AND FUTURE DEMANDS. ALSO, THE AUTHOR IS CONCERNED WITH ANOTHER WATER RESOURCE PROBLEM, FLOODING, BECAUSE LOSS OF LIFE AND PROPERTY FROM FLOODWATERS CONTINUE TO BE SIGNIFICANT AND AFFECTS ALL PARTS OF THE UNITED STATES. WATER RESOURCES PLANNING ENCOMPASSES THE ASSESSMENT OF THE QUANTITY AND QUALITY OF AVAILABLE WATER SUPPLIES, FORECASTING FUTURE WATER DEMANDS, ANALYSIS OF EXISTING AND POTENTIAL WATER SUPPLY PROBLEMS, AND PREPARING PROPOSALS FOR RESOLVING SUCH PROBLEMS. THIS STUDY EXAMINES EXISTING AND EMERGING WATER RESOURCE ISSUES AND REPRESENTS THE PERSPECTIVE GAO IS USING TO ORGANIZE ITS AUDIT EFFORTS.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $5.25.

IRIS ACCESSION NUMBER: EW004559

PUBLICATION DATE: 78

TITLE: PARTIALLY ANNOTATED TIDAL MARSH BIBLIOGRAPHY. SECOND EDITION. SELECTED KEY WORD INDEX.

PERSONAL AUTHOR: DAIBER, FRANKLIN C.; GANZMAN, ELLEN C.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; ECOLOGY; *ENVIRONMENT; MARSHES; *OCEANOLOGY; *RESEARCH; *SEA GRANT; SWAMPS; *TIDAL MARSHES; *WATER RESOURCES

DESCRIPTIVE NOTE: 432P.

ABSTRACT: PRESENTED IS AN ANNOTATED BIBLIOGRAPHY ENCOMPASSING ALL ASPECTS OF TIDAL MARSHES. KEYWORDS HAVE BEEN IDENTIFIED FOR GENERAL GROUPINGS OF TOPICS. INTEREST AREAS CAN BE SEARCHED BY SCANNING THE VARIOUS KEY WORDS FOLLOWED BY AUTHOR SELECTION AND TITLE PERUSAL. MANY ARTICLES ARE CROSS REFERENCED ENABLING THE SEARCHER TO FIND A PARTICULAR ITEM FROM VARIOUS AVENUES OF APPROACH.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $14.00.

IRIS ACCESSION NUMBER: EW004562

PUBLICATION DATE: 78

TITLE: ENERGY REQUIREMENTS OF PRESENT POLLUTION CONTROL TECHNOLOGY.

PERSONAL AUTHOR: SERTH, R.W.; HOCKETT, R.S.

DESCRIPTOR: *AIR POLLUTION CONTROL; *ENERGY CONSERVATION; *ENERGY; ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *POLLUTION; *TECHNOLOGY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 90P.

ABSTRACT: ESTIMATES OF ENERGY REQUIREMENTS FOR POLLUTION CONTROL AT STATIONARY SOURCES IN THE UNITED STATES, AS COMPILED FROM THE LITERATURE, ARE PRESENTED AND DISCUSSED. THE DATA ARE ANALYZED TO DETERMINE THE DISTRIBUTION OF ENERGY REQUIREMENTS AMONG ECONOMIC SECTORS AND AMONG

POLLUTANT TYPES. ALTERNATIVE METHODS OF POLLUTION CONTROL THAT ARE POTENTIALLY LESS ENERGY INTENSIVE AND STILL CAPABLE OF MEETING ENVIRONMENTAL REGULATIONS ARE ALSO DISCUSSED.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $6.50

IRIS ACCESSION NUMBER: EW004564

PUBLICATION DATE: 79

TITLE: HAZARDOUS MATERIALS SPILL MONITORING SAFETY HANDBOOK AND CHEMICAL HAZARD GUIDE PART B-CHEMICAL DATA.

PERSONAL AUTHOR: WILLIAMS, LLEWELLYN R.; AND OTHERS.

DESCRIPTOR: *CHEMICALS; CHEMICAL ANALYSIS; *CHEMICAL INDUSTRY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *HAZARDOUS MATERIALS; POLLUTION; *SAFETY; SAFETY EDUCATION; *SAFETY EQUIPMENT; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; WASTE DISPOSAL

DESCRIPTIVE NOTE: 674P.

ABSTRACT: THIS DOCUMENT IS THE SECOND PART OF A TWO-PART VOLUME INTENDED TO SERVE AS A GUIDE TO THE HAZARDS ASSOCIATED WITH A BROAD RANGE OF CHEMICAL COMPOUNDS WHICH MAY BE ENCOUNTERED IN HAZARDOUS MATERIAL SPILLS. THIS DOCUMENT INDEXES 635 CHEMICALS IDENTIFIED ON THE BASIS OF KNOWN TOXICITY OR SPILL HISTORY AND DESIGNATED "HAZARDOUS" BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY. INCLUDED IS A DATA SHEET FOR EACH CHEMICAL SHOWING ITS CAS NUMBER, SYNONYMS, AND HAZARD PRIORITY NUMBER. THE SHEET ALSO GIVES INFORMATION ON HAZARDS, SAFETY MEASURES, AND EXPOSURE. THIS PART IS PROVIDED IN A FORM FOR LOOSE-LEAF BINDING TO FACILITATE ADDITION, REVISION, AND UPDATING AS NEW DATA BECOME AVAILABLE.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $19.00.

IRIS ACCESSION NUMBER: EW004565

PUBLICATION DATE: 79

TITLE: WASTEWATER TREATMENT FACILITIES PLANNING IN THE BOSTON METROPOLITAN AREA--A CASE STUDY.

PERSONAL AUTHOR: ANDERSON, WILLIAM A; KENNEDY, ROBERT M.

DESCRIPTOR: CITIZEN PARTICIPATION; CITY PROBLEMS; *CONSTRUCTION; *ENVIRONMENTAL PROTECTION AGENCY; ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *FEDERAL ROLE; *FACILITIES; GOVERNMENT ROLE: *PLANNING; POLLUTION; *REGIONAL PLANNING; *WASTEWATER TREATMENT; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 748P.

ABSTRACT: THIS REPORT IS ONE OF FOUR CONTRACTOR-PREPARED REPORTS WHICH COMPRISE A FEDERALLY-SPONSORED STUDY, "SCIENTIFIC AND TECHNICAL EVALUATION OF THE ENVIRONMENTAL PROTECTION AGENCY'S WASTEWATER TREATMENT FACILITIES GRANTS PLANNING PROCESS-BOSTON CASE STUDY." THE OBJECTIVE OF THE STUDY WAS TO EXAMINE RECENT OPERATION OF EPA'S CONSTRUCTION GRANTS PROGRAM, USING THE BOSTON METROPOLITAN AREA AS A CASE STUDY, WITH A VIEW TOWARD DEVELOPING RECOMMENDATIONS FOR POSSIBLE LEGISLATIVE OR ADMINISTRATIVE ACTIONS AT THE NATIONAL LEVEL. THIS ENGINEERING REPORT REVIEWS THE DEVELOPMENT AND PLANNING OF SEWERAGE FACILITIES IN EASTERN MASSACHUSETTS, EVALUATES THE PRESENT MAJOR TREATMENT WORKS, IDENTIFIES VARIOUS POLLUTION PROBLEMS, EXAMINES AVAILABLE LOCAL PLANS, AND EVALUATES TECHNICAL ALTERNATIVES. PROBLEMS EXAMINED INCLUDE RAW SEWAGE DISCHARGES, COMBINED SEWER OVERFLOWS, SEWAGE BYPASSES, AND EXCESSIVE INFLOW/INFILTRATION. THE EXTENT OF CONSOLIDATION AND THE DEGREE TO WHICH WATER CONSERVATION IS PRACTICAL ARE EVALUATED. THIS CASE STUDY INDICATES THAT APPROPRIATE FACILITIES PLANNING CAN REDUCE THE SCOPE OF NEW WASTEWATER PROJECTS. TO OPTIMIZE PLANNING EFFICIENCY, FEDERAL GUIDELINES ARE NEEDED.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $21.50

IRIS ACCESSION NUMBER: EW004566

PUBLICATION DATE: 79

TITLE: HAZARDOUS WASTES MANAGEMENT IN ILLINOIS.

PERSONAL AUTHOR: PATTERSON ASSOCIATES, INC.

DESCRIPTOR: ENVIRONMENT; *GOVERNMENT ROLE; *HAZARDOUS MATERIALS; *HAZARDOUS WASTES; *INDUSTRY; LAWS; *MANAGEMENT; MUNICIPALITIES; *ILLINOIS; *RESOURCE CONSERVATION AND RECOVERY ACT; *REGULATIONS; *STATE PLANS; *WASTE DISPOSAL; WASTES.

DESCRIPTIVE NOTE: 97P.

ABSTRACT: ASSESSED IN THIS REPORT ARE THE IMPLICATIONS OF THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OF 1976 WITH RESPECT TO THE GENERATION, MANAGEMENT, AND DISPOSAL OF HAZARDOUS WASTES IN ILLINOIS. THIS REPORT DEALS PRIMARILY WITH SUBTITLE C OF RCRA. AREAS OF IMPACT OF RCRA, INCLUDING SUBFEDERAL GOVERNMENT (STATE AND LOCAL), AS WELL AS HAZARDOUS WASTES GENERATORS, TRANSPORTERS, STORES, RECEIVERS, AND DISPOSAL FACILITIES ARE IDENTIFIED. PROPOSED REGULATIONS PUBLISHED BY THE US EPA UNDER SUBTITLE C OF RCRA ARE REVIEWED. THE SOLID WASTE CHARACTERISTICS OF BOTH INDUSTRIAL AND MUNICIPAL SOURCES ARE REVIEWED AND THE MANAGEMENT ALTERNATIVES AND ECONOMICS OF HAZARDOUS WASTE MANAGEMENT ARE DETAILED. BECAUSE OF THE LACK OF A RELIABLE DATA BASE, THIS REPORT IS LIMITED TO THE FORECAST APPROACH IN ASSESSING THE IMPACT OF RCRA IN ILLINOIS.

AVAILABILITY: ILLINOIS INSTITUTE OF NATURAL RESOURCES, 309 W WASHINGTON ST. CHICAGO, IL 60606 TELE. (312-793-3873).

IRIS ACCESSION NUMBER: EW004567
PUBLICATION DATE: APR 79

TITLE: SCIENTIST'S REPORT: NATIONAL SYMPOSIUM ON WETLANDS.

PERSONAL AUTHOR: CLARK, JOHN; CLARK, JUDITH, EDITORS

DESCRIPTOR: *AGENCIES; ECOLOGY; *FEDERAL GOVERNMENT; *GOVERNMENT ROLE; HYDROLOGY; ORGANIZATIONS (GROUPS); *SCIENTISTS; *SYMPOSIA; WATER QUALITY; *WATER RESOURCES; *WETLANDS.

DESCRIPTIVE NOTE: 129P.

ABSTRACT: DESCRIBED IS THE STATUS OF SCIENTIFIC KNOWLEDGE ABOUT THE FUNCTIONS AND VALUES OF THE NATION'S WETLANDS IN 1978 RESULTING FROM A DISCUSSION BETWEEN FEDERAL AGENCY REPRESENTATIVES AND WETLANDS SCIENTISTS. THE CONTENT IS THE RECORD OF A WORKSHOP HELD AT LAKE BUENA VISTA, FLORIDA, IN 1978. WORKSHOP SCIENTISTS MET IN SIX CONCURRENT PANELS TO ADDRESS THE WETLANDS INFORMATION NEEDS OF THE FEDERAL SPONSORING AGENCIES AS INDICATED IN QUESTIONS SUBMITTED BY THE AGENCIES TWO MONTHS IN ADVANCE OF THE SYMPOSIUM. 233 QUESTIONS WERE REVIEWED AND RESPONSES WERE PROVIDED BY PANEL MEMBERS FOR MOST OF THEM.

AVAILABILITY: JOHN R. CLARK, NATIONAL WETLANDS TECHNICAL COUNCIL, 1717 MASSACHUSETTS AVE, N.W., SUITE 300, WASHINGTON, D.C. 20036 (202-797-4360)

IRIS ACCESSION NUMBER: EW004571

PUBLICATION DATE: 74

TITLE: AN AMERICAN LANDMARK.

DESCRIPTOR: AUDIOVISUAL AIDS; CASE STUDIES; *CONSTRUCTION; *FILMS; *INSTRUCTIONAL MATERIALS; *PLANNING; POST SECONDARY EDUCATION; *TANKS (STEEL); *TECHNICAL EDUCATION; *WATER SUPPLY; WATER RESOURCES; *WATER STORAGE

DESCRIPTIVE NOTE: 20 MUNUTE, COLOR 16MM FILM.

ABSTRACT: ILLUSTRATED IN THIS CASE STUDY ARE THE PLANNING, SITE PREPARATION, AND CONSTRUCTION OF A 1.5 MILLION GALLON HORTON SPHEROIDAL STEEL WATER STORAGE TANK BY CHICAGO BRIDGE AND IRON COMPANY IN WHEATON, ILLINOIS.

AVAILABILITY: AWWA, 6666 W QUINCY AVE., DENVER, CO 80235. LOAN-$3.00.

IRIS ACCESSION NUMBER: EW004572

PUBLICATION DATE: 75

TITLE: WATER FOLLIES: A SOAK OPERA.

DESCRIPTOR: *ANIMATION; AUDIOVISUAL AIDS; *CONSERVATION; ELEMENTARY SECONDARY EDUCATION; *FILMS; *INSTRUCTONAL MATERIALS; NATURAL RESOURCES; *WATER RESOURCES; *WATER USE.
DESCRIPTIVE NOTE: 7 MINUTE, COLOR, 16MM FILM.

ABSTRACT: ILLUSTRATED IN THIS ANIMATED FILM ARE THE MANY WAYS THAT PEOPLE WASTE WATER IN THEIR DAILY ROUTINE.

AVAILABILITY: AWWA, 6666 W QUINCY AVE., DENVER, CO 80235. RENTAL $5.00.

IRIS ACCESSION NUMBER: EW004573

PUBLICATION DATE: 70

TITLE: SANITARY SAFETY BY PREVENTING BACK SIPHONAGE.

DESCRIPTOR: AUDIOVISUAL AIDS; *CROSS CONNECTIONS; *FILMS; *HEALTH; *INSTRUCTIONAL MATERIALS; *PIPES; POST SECONDARY EDUCATION; SAFETY; *SANITATION; WATER DISTRIBUTION; *WATER SUPPLY; *WATER POLLUTION CONTROL; *VACUUM BREAKERS

DESCRIPTIVE NOTE: 10 MINUTE, COLOR 16MM FILM.

ABSTRACT: ILLUSTRATED IS THE PROBLEM OF BACK SIPHONAGE WHEN WATER SUPPLY PIPES ARE CROSS-CONNECTED WITH FIXTURES SUCH AS SINKS AND TOILETS. THE PRINCIPLES ASSOCIATED WITH VACUUM BREAKERS ARE INTRODUCED AND THE PROPER INSTALLATION OF A VACUUM BREAKER IS DEMONSTRATED.

AVAILABILITY: AWWA, 6666 WEST QUINCY AVE, DENVER, CO 80235. RENTAL $3.00.

IRIS ACCESSION NUMBER: EW004574

PUBLICATION DATE: 74

TITLE: MEASURING WITH METERS.

DESCRIPTOR: AUDIOVISUAL AIDS; *CALCULATION; *FILMS; *INSTRUCTIONAL MATERIALS; *MATHEMATICS; *MEASUREMENT; *METRIC SYSTEM; *POST SECONDARY EDUCATION

DESCRIPTIVE NOTE: 16MM, COLOR FILM-23 MINUTES.

ABSTRACT: PRESENTED IS AN INTRODUCTION TO THE METRIC SYSTEM. THE COMPLEXITY OF THE ENGLISH SYSTEM OF MEASUREMENT VERSUS THE SIMPLICITY OF THE METRIC SYSTEM IS ILLUSTRATED. CONCEPTS INCLUDE LENGTH, WEIGHT, VOLUME AND AREA.

AVAILABILITY: AWWA, 6666 WEST QUINCY AVENUE, DENVER, CO 80235. RENTAL $11.00.

IRIS ACCESSION NUMBER: EW004575

PUBLICATION DATE: JAN 77

TITLE: REPORT ON THE ROLE DELINEATION PROJECT FOR PRACTITIONERS IN ENVIRONMENTAL HEALTH.

DESCRIPTOR: CAREERS; *ENVIRONMENT; ENGINEERING; GOVERNMENT ROLE; *JOB SKILLS; MODELS; *POLLUTION; *PUBLIC HEALTH; PROGRAM PLANNING; *ROLE MODELS; *ROLE PERCEPTION; TRAINING

DESCRIPTIVE NOTE: 102P.

ABSTRACT: THE PURPOSE OF THE PROJECT DESCRIBED IN THIS REPORT IS TO IDENTIFY THE ROLES AND FUNCTIONS OF THOSE PRACTITIONERS IN THE FIELD OF ENVIRONMENTAL HEALTH TRADITIONALLY REFERRED TO AS SANITARIANS. FOR THREE ENTRY-LEVEL POSITIONS SELECTED FROM THIS CAREER CATEGORY, THE KNOWLEDGE, SKILLS, AND ATTRIBUTES NECESSARY FOR PRACTITIONER PROFICIENCY ARE COMMUNICATED THROUGH DETAILED PERFORMANCE STATEMENTS. THESE PERFORMANCE STATEMENTS, WHICH COMPRISE THE ROLE DELINEATION MODEL, APPLY TO PRACTITIONERS WORKING IN FEDERAL, STATE, AND LOCAL GOVERNMENTAL SETTINGS AND PRIVATE INDUSTRY, AND WILL BE USED AS THE BASIS FOR THE DEVELOPMENT OF EDUCATION PROGRAMS AND PROFICIENCY EXAMINATIONS.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161 PRICE: $6.50

IRIS ACCESSION NUMBER: EW004577

PUBLICATION DATE: JAN 80

TITLE: WATER REQUIREMENTS FOR INDUSTRIAL DEVELOPMENT.

PERSONAL AUTHOR: KILLAR, L. L; MACAULEY, PATRICK.

DESCRIPTOR: DECISION MAKING; *DEVELOPMENT; *ECONOMICS; INDUSTRIAL SITING; *INDUSTRY; MANAGEMENT; *OPERATIONS (INDUSTRIAL); *PLANNING; RECYCLING; *WATER RESOURCES; *WATER USE.

DESCRIPTIVE NOTE: 2-9P.

ABSTRACT: DESCRIBED ARE CRITERIA FOR DECISIONS BY ECONOMIC DEVELOPMENT PLANNERS DEALING WITH THE REQUIREMENTS FOR AND THE IMPACT OF WATER USE ON INDUSTRIAL SITING. RELATIONSHIPS ARE DEVELOPED BETWEEN WATER USE AND INDUSTRIAL PRODUCTION FOR 34 BASIC INDUSTRIES. RELATIONSHIPS BETWEEN WATER USE AND EMPLOYMENT ARE EXAMINED FOR 20 MAJOR INDUSTRIAL GROUPS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004578

PUBLICATION DATE: JAN 80

TITLE: A SURVEY OF QUALITY CONTROL PRACTICES IN WATER BACTERIOLOGY LABORATORIES.

DESCRIPTOR: CHEMICAL ANALYSIS; *EVALUATION; *LABORATORIES (WATER); LABORATORY EQUIPMENT; *LABORATORY PROCEDURES; *MICROBIOLOGY; *QUALITY CONTROL; RESEARCH; *STANDARDS; *SURVEYS; UTILITIES; WASTEWATER TREATMENT; WATER TREATMENT; *AWWA COMMITTEE ON MICROBIOLOGICAL PROBLEMS.

DESCRIPTIVE NOTE: 10-20P.

ABSTRACT: PRESENTED ARE THE RESULTS OF THE AWWA COMMITTEE ON MICROBIOLOGICAL PROBLEMS SURVEY OF QUALITY CONTROL PRACTICES IN WATER LABORATORIES. TWO SETS OF DATA ARE EXTRACTED FROM THE RETURNS; LABORATORIES PARTICIPATING IN THE SURVEY ARE GROUPED BY ACTIVITY AND WATER AND WASTEWATER UTILITIES ARE CLASSIFIED BY POPULATION SERVED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004579

PUBLICATION DATE: JAN 80

TITLE: AN EARLY WARNING ORGANICS DETECTION SYSTEM FOR THE OHIO RIVER.

PERSONAL AUTHOR: MOORE, GLENN E.; AND OTHERS.

DESCRIPTOR: CHEMICAL ANALYSIS; MEASUREMENT; *MONITORING; *ORGANICS; REGULATIONS; ORSANCO; *RIVERS; *UTILITIES (WATER); *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 21-26P.

ABSTRACT: DESCRIBED IS THE CREATION, IMPLEMENTATION, AND OPERATION OF THE EARLY WARNING ORGANICS DETECTION SYSTEM (EWODS) FOR THE OHIO RIVER AND ITS MAJOR TRIBUTARIES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004580

PUBLICATION DATE: JAN 80

TITLE: RESERVOIR IMPROVEMENTS AS A KEY TO SOURCE QUALITY CONTROL.

PERSONAL AUTHOR: CASTORINA, ANTHONY R.

DESCRIPTOR: *COSTS; DRINKING WATER; *ENGINEERING; MANAGEMENT; *RESERVOIRS; CONNECTICUT; *UTILITIES; *WATER QUALITY; WATER TREATMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: 27-30P.

ABSTRACT: DESCRIBED ARE TWO RESERVOIR SYSTEMS IN WHICH MAJOR PROBLEMS WERE SOLVED BY SIMPLE, INEXPENSIVE, AND PERMANENT MEASURES THAT SIGNIFICANTLY IMPROVED THE SOURCE WATER QUALITY AND REDUCED THE COSTS FOR WATER TREATMENT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004581
PUBLICATION DATE: JAN 80

TITLE: AN EVALUATION OF ACTIVATED CARBON FOR DRINKING WATER TREATMENT: A NATIONAL ACADEMY OF SCIENCE REPORT.

PERSONAL AUTHOR: SUFFET, I. H.

DESCRIPTOR: ADSORPTION EFFICIENCY; CHEMICAL ANALYSIS; CHEMICAL REACTIONS; *DRINKING WATER; *EVALUATION; HEALTH; MICROBIOLOGY; *GRANULAR ACTIVATED CARBON (GAC); *MONITORING; *ORGANICS; RESEARCH; WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 41-50P.

ABSTRACT: PRESENTED ARE THE RESULTS OF THE NATIONAL ACADEMY OF SCIENCE REPORT ON THE USE OF ACTIVATED CARBON FOR DRINKING WATER TREATMENT WITH SPECIAL EMPHASIS ON HOW THE EFFICIENCY OF ADSORBANTS IS DEFINED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004582

PUBLICATION DATE: JAN 80

TITLE: CONTROLLING BED LOSSES OF GRANULAR ACTIVATED CARBON THROUGH PROPER FILTER OPERATION.

PERSONAL AUTHOR: FERRARA, A. PETER.

DESCRIPTOR: COSTS; *DRINKING WATER; FACILITIES; *FILTERS; MEASUREMENT; *OPERATIONS; *GRANULAR ACTIVATED CARBON (GAC); TECHNOLOGY; *WATER TREATMENT

DESCRIPTIVE NOTE: 60-63P.

ABSTRACT: DESCRIBED IS A METHOD FOR PREDICTING, PRIOR TO THE INSTALLATION OF G.A.C. IN RAPID GRAVITY FILTERS, WHETHER FED LOSSES WILL OCCUR. APPLICATION CAN ENABLE TREATMENT PLANTS TO OPERATE EFFICIENTLY USING G.A.C.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004583

PUBLICATION DATE: JAN 80

TITLE: FEASIBILITY STUDIES ON LIQUID ION EXCHANGE FOR ALUM RECOVERY FROM WATER TREATMENT PLANT SLUDGES.

PERSONAL AUTHOR: CORNWELL, DAVID A.; LEMUNYON, ROGER M.

DESCRIPTOR: *ALUM; CHEMICAL ANALYSIS; *DESIGN; *FEASIBILITY STUDIES; INSTRUMENTATION; *LIQUID ION EXCHANGE; MEASUREMENT; *RESEARCH; *SLUDGE; *WATER TREATMENT

DESCRIPTIVE NOTE: 64-68P.
ABSTRACT: DESCRIBED IS RESEARCH CONDUCTED TO EVALUATE THE APPLICABILITY OF LIQUID ION EXCHANGE TO ALUM RECOVERY FROM WATER TREATMENT PLANT SLUDGES AND TO DEVELOP THE APPROPRIATE DESIGN PARAMETERS FOR A BENCH SCALE PILOT PLANT.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N1.

IRIS ACCESSION NUMBER: EW004589

PUBLICATION DATE: 78

TITLE: ENERGY: A GUIDE TO ORGANIZATIONS AND INFORMATION RESOURCES IN THE UNITED STATES. SECOND EDITION.

DESCRIPTOR: *AGENCIES, CONSERVATION (ENVIRONMENT); *ENERGY; ENVIRONMENT; FEDERAL GOVERNMENT; INFORMATION SERVICES; *INFORMATION SOURCES; NATURAL RESOURCES; *ORGANIZATIONS (GROUP); *RESOURCE GUIDES; STATE GOVERNMENT; *UNITED STATES.

DESCRIPTIVE NOTE: 221P.

ABSTRACT: THIS PUBLICATION IS A CENTRAL SOURCE OF INFORMATION ON ORGANIZATIONS IN THE U.S. THAT ARE INVOLVED IN ENERGY ISSUES. ADDRESSES ARE GIVEN AND DESCRIPTIONS OF ACTIVITIES ARE USUALLY INCLUDED FOR EACH ORGANIZATION LIST. FEDERAL, INTERSTATE, STATE, AND OTHER ORGANIZATIONS ARE LISTED UNDER ENERGY CATEGORIES WHICH INCLUDE THE VARIOUS ENERGY SOURCES; CONSERVATION, ENVIRONMENTAL IMPACTS, AND CONSUMER IMPACTS. "OTHER ORGANIZATIONS" INCLUDE TRADE, PROFESSIONAL, AND CITIZENS' GROUPS, RESEARCH CENTERS, AND INFORMATION CLEARINGHOUSES. EMPHASIS IS GIVEN TO ORGANIZATIONS THAT INFLUENCE, FORMULATE, OR ADMINISTER POLICIES AFFECTING ENERGY PRODUCTION, DISTRIBUTION, AND USE, OR THAT PROVIDE INFORMATION OF INTEREST TO THE NON-SPECIALIST.

AVAILABILITY: PUBLIC AFFAIRS CLEARINGHOUSE, PO BOX 10, CLAREMONT, CA 91711 (714-624-5212) PRICE: $20.00

IRIS ACCESSION NUMBER: EW004591

PUBLICATION DATE: MAY 79

TITLE: DESALTING WATER PROBABLY WILL NOT SOLVE THE NATION'S WATER PROBLEMS, BUT CAN HELP.

DESCRIPTOR: *DESALINATION; *FEDERAL GOVERNMENT; *FEDERAL PROGRAMS; GOVERNMENT ROLE; MANAGEMENT; *NEEDS ASSESSMENT; *PLANNING; *RESEARCH; *SALINE WATER; *TECHNOLOGY; *WATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 22P.

ABSTRACT: DISCUSSED IS THE NEED FOR THE OFFICE OF WATER RESEARCH AND TECHNOLOGY TO DEVELOP AND IMPLEMENT A COMPREHENSIVE, WELL-DEFINED SALINE WATER CONVERSION PROGRAM AIMED AT ACHIEVING A PRACTICAL, LOW-COST, DESALTING METHOD.

THE STATUS OF SALINE WATER CONVERSION TECHNOLOGY IS SUMMARIZED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $4.50.

IRIS ACCESSION NUMBER: EW004592

PUBLICATION DATE: JAN 79

TITLE: IMPACT OF NONPOINT POLLUTION CONTROL ON WESTERN LAKE SUPERIOR.

PERSONAL AUTHOR: ANDREWS, STEPHEN C; AND OTHERS.

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *EROSION CONTROL; *GREAT LAKES; *GUIDELINES; *INTERSTATE PROGRAMS; *LAKE SUPERIOR; MANAGEMENT; *NONPOINT SOURCE POLLUTION; PLANNING; *RESEARCH; *SEDIMENTATION; *WATER QUALITY; WATERSHEDS; *RED CLAY PROJECT.

DESCRIPTIVE NOTE: 33P.

ABSTRACT: PRESENTED IS THE FINAL REPORT OF THE RED CLAY PROJECT, A SEDIMENT EROSION-CONTROL PROJECT WITHIN THE GREAT LAKES DRAINAGE BASIN. DISCUSSED ARE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS FROM THIS PROJECT TO IMPROVE WATER QUALITY IN THE GREAT LAKES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $4.50. EPA # 905/9-79-002.

IRIS ACCESSION NUMBER: EW004599

PUBLICATION DATE: JAN 79

TITLE: SLUDGE MANAGEMENT PLANNING IN THE BOSTON METROPOLITAN AREA-A CASE STUDY.

PERSONAL AUTHOR: FOGEL, SAMUEL; AND OTHERS.

DESCRIPTOR: *CONSTRUCTION GRANTS PROGRAM; *CASE STUDIES; *COST EFFECTIVENESS; *ENVIRONMENTAL PROTECTION AGENCY; *FACILITIES; *FEDERAL PROGRAMS; *MANAGEMENT; *MASSACHUSETTS; *POLLUTION; *PLANNING; RECYCLING; *SLUDGE; *WASTEWATER TREATMENT; *WASTE DISPOSAL; *WATER POLLUTION CONTROL; WATER RESOURCES; WASTES

DESCRIPTIVE NOTE: 528P.

ABSTRACT: THIS REPORT IS ONE OF FOUR REPORTS WHICH COMPRISE A GOVERNMENT SPONSORED STUDY, "SCIENTIFIC AND TECHNICAL EVALUATION OF THE ENVIRONMENTAL PROTECTION AGENCY'S WASTEWATER TREATMENT FACILITIES GRANTS PLANNING PROCESS-BOSTON CASE STUDY." THE OBJECTIVE OF THE STUDY WAS TOEXAMINE THE OPERATION OF EPA'S CONSTRUCTION GRANTS PROGRAM, USING THE BOSTON METROPOLITAN AREA AS A CASE STUDY, WITH A VIEW TOWARD DEVELOPING RECOMMENDATIONS FOR POSSIBLE LEGISLATIVE OR ADMINISTRATIVE ACTIONS AT THE NATIONAL LEVEL. ANALYZED WERE PLANNING EFFORTS FOR DISPOSAL OF WASTEWATER SLUDGES IN THE BOSTON METROPOLITAN AREA. ECONOMIC AND INSTITUTIONAL FACTORS INFLUENCING THE PLANNING PROCESS ARE IDENTIFIED. THE COST OF NINE BASIC SLUDGE TREATMENT AND DISPOSAL OPTIONS ARE ANALYZED, AND AN ANALYSIS WAS PERFORMED TO IDENTIFY FUTURE TECHNICAL, ECONOMIC, AND REGULATORY CHANGES THAT MAY AFFECT PRESENT DECISIONS. THIS REPORT FINDS THAT THE OPERATIONAL PERFORMANCE OF THE RECOMMENDED INCINERATION OPTION IS UNCERTAIN. A DECISION TREE WAS DESIGNED TO DETERMINE WHETHER THE PROPOSED INCINERATOR SHOULD BE BUILT NOW OR IN ABOUT FIVE YEARS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $15.50.

IRIS ACCESSION NUMBER: EW004601

PUBLICATION DATE: 66

TITLE: PETIT MANUEL DE CONSERVATION DES EAUX ET DU SOL (TEACHING SOIL AND WATER CONSERVATION).

PERSONAL AUTHOR: FOSTER, ALBERT B; FOX, ADRIAN C.

DESCRIPTOR: *AUDIOVISUAL AIDS; AGRICULTURE; *CONSERVATION (ENVIRONMENT); *DEVELOPING NATIONS; EROSION; *INSTRUCTION; *SOIL SCIENCE; *TEACHING METHODS; VISUAL AIDS

DESCRIPTIVE NOTE: 59P.

ABSTRACT: PRESENTED, IN FRENCH, ARE TECHNIQUES FOR PRESENTING GRAPHIC VISUAL DEMONSTRATIONS THAT EXPLAIN HOW SOIL IS FORMED AND ERODED. METHODS ARE PRESENTED TO HELP COMMUNITY LEADERS OR OTHERS PREPARE TO TEACH BASIC CONSERVATION PRACTICES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $5.25.

IRIS ACCESSION NUMBER: EW004604

PUBLICATION DATE: NOV 77

TITLE: FORESTED WETLANDS FOR WATER RESOURCE MANAGEMENT IN SOUTHERN ILLINOIS.

PERSONAL AUTHOR: MITSCH, WILLIAM J; AND OTHERS.

DESCRIPTOR: CHEMICAL ANALYSIS; *ECOLOGY; FORESTRY; HYDROLOGY; *MANAGEMENT; *MEASUREMENT; NONPOINT SOURCES; *RESEARCH; RIVERS; *SWAMPS (CYPRESS); *WATER QUALITY; WATER RESOURCES; *WETLANDS.

DESCRIPTIVE NOTE: 275P.

ABSTRACT: DESCRIBED ARE THE HYDROLOGIC, BIOGEOCHEMICAL, AND ECOLOGICAL CHARACTERISTICS OF HERON POND, A 4770 HECTARE FORESTED SWAMP IN SOUTHERN ILLINOIS. PARTICULAR ATTENTION IS PAID TO THE INTERACTION OF THE SWAMP WITH ITS ADJACENT RIVER, THE CACHE. THE STUDY INVESTIGATED THE ROLE OF SWAMPS

IN PERFORMING NATURAL SERVICES THAT WOULD OTHERWISE COST MAN FOSSIL FUEL ENERGY TO ACHIEVE. HYDROLOGY AND PHOSPHOROUS BUDGETS WERE DETERMINED AND LOADING RATES FOR SEVERAL CHEMICAL PARAMETERS WERE CALCULATED. THE WATER CHEMISTRY OF THE SWAMP AND RIVER IS CONTRASTED.

AVAILABILITY: UNIV OF ILLINOIS, WATER RESOURCES CENTER, 2535 HYDROSYSTEMS LAB., URBANA, IL 61801. PRICE: $7.50

IRIS ACCESSION NUMBER: EW004605

PUBLICATION DATE: JUN 79

TITLE: ADVANCED METHODOLOGY FOR STORM SEWER DESIGN-PHASE II.

PERSONAL AUTHOR: WENZEL JR, HARRY G.; AND OTHERS.

DESCRIPTOR: COST EFFECTIVENESS; *DESIGN; *DRAINAGE SYSTEMS; *HYDRAULICS; *MATHEMATICAL MODELS; *SEWERS; *STORM DRAINS; *STORM RUNOFF; *URBAN AREAS; URBAN DRAINAGE

DESCRIPTIVE NOTE: 78P.

ABSTRACT: DESCRIBED IS THE DEVELOPMENT OF COMPUTER MODELS FOR DETERMINING THE DIAMETER, SLOPE, AND ELEVATIONS OF EACH PIPE IN A STORM SEWER DRAINAGE SYSTEM IN WHICH THE LAYOUT AND MANHOLE LOCATIONS ARE SPECIFIED. THE DESIGN PROCEDURE IS BASED ON LEAST-COST CRITERION AND UTILIZES DISCRETE DIFFERENTIAL DYNAMIC PROGRAMMING AS THE SEARCH TECHNIQUE. IN THIS PHASE OF THE STUDY DETENTION STORAGE CAPABILITY AND A SURFACE RUNOFF COMPONENT HAVE BEEN ADDED. THE STORM RUNOFF COMPONENT UTILIZES THE HYDROGRAPH GENERATION PORTION OF THE ILLINOIS URBANA DRAINAGE AREA SIMULATOR MODEL. IMPROVED COST SPECIFICATION METHODS AND FLEXIBLE PIPE ELEVATION CONSTRAINT CAPABILITIES HAVE BEEN ADDED. THE DEVELOPMENTS ARE ILLUSTRATED USING TWO EXAMPLE BASINS.

AVAILABILITY: UNIV OF ILLINOIS, WATER RESOURCE CENTER, 2535 HYDROSYSTEMS LAB., URBANA, IL. 61801. PRICE: $4.00.

IRIS ACCESSION NUMBER: EW004606

PUBLICATION DATE: OCT 78

TITLE: ION EXCHANGE MEMBRANE METHODS FOR CONTINUOUS REMOVAL OF IONS FROM WATER AND TRACE CHEMICAL ANALYSIS.

PERSONAL AUTHOR: COX, JAMES A.

DESCRIPTOR: *CHEMICAL ANALYSIS; *DONNAN DIALYSIS; *ELECTROCHEMISTRY; INSTRUMENTATION; *ION SELECTIVE MEMBRANES; *MEASUREMENT; *METALS; NITRATES; PHOSPHATES; RESEARCH; TRACE ANALYSIS (INORGANICS); *WASTEWATER TREATMENT; WATER QUALITY.

DESCRIPTIVE NOTE: 67P.

ABSTRACT: REPORTED ARE THE RESULTS OF TESTING A SYSTEM FOR CONTINUOUS REMOVAL OF SELECTED IONS FROM WATER AND WASTEWATER SAMPLES. DONNAN DIALYSIS IS USED AND FOLLOWED BY ELECTROCHEMICAL DEACTIVATION. A SUCCESSFUL MEANS FOR CONTINUOUSLY REDUCING NITRATE TO AMMONIA WAS DEVELOPED, BUT REMOVAL OF PHOSPHATE BASED UPON PLATING THE ION AS A SPARINGLY SOLUBLE SALT ON AN ELECTRODE FAILED BECAUSE OF SURFACE PASSIVATIION.

AVAILABILITY: UNIV OF ILLINOIS, WATER RESOURCES CENTER, 2535 HYDROSYSTEMS LAB., URBANA, IL 61801. PRICE: $3.50.

IRIS ACCESSION NUMBER: EW004607

PUBLICATION DATE: MAY 79

TITLE: SIMPLIFIED N.O.D. DETERMINATION.

PERSONAL AUTHOR: SLAYTON, J. L.; TROVATO, E. R.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BIOCHEMICAL OXYGEN DEMAND; *BOD; *CHEMICAL ANALYSIS; *OXYGEN; *EFFLUENTS; *LABORATORY TECHNIQUES; MEASUREMENT; *NITRIFICATION; NITRATES; RESEARCH; *SEWAGE; WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; WATER QUALITY.

DESCRIPTIVE NOTE: 32P.

ABSTRACT: DESCRIBED IS AN ANALYTICAL PROCEDURE INVOLVING AN INHIBITOR TO NITRIFICATION, N-SERVE, THAT CAN PROVIDE AN ACCURATE AND PRECISE MEASUREMENT OF NITRIFICATION OCCURRING IN THE BOD TEST, WHILE NOT AFFECTING THE CARBONACEOUS OXYGEN DEMAND. EXTENSIVE TESTING WAS PERFORMED ON SEWAGE TREATMENT PLANT EFFLUENTS AND ON THE RECEIVING WATERS OF THE POTOMAC AND LEHIGH RIVERS. DETAILED RESULTS ARE PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $4.50.

IRIS ACCESSION NUMBER: EW004608

PUBLICATION DATE: 79

TITLE: SALT MARSHES VOLUME 2. 1977- MAY 1979. A BIBLIOGRAPHY WITH ABSTRACTS.

DESCRIPTOR: *ABSTRACTS; *BIBLIOGRAPHIES; ECOLOGY; LAND USE; REFERENCE MATERIALS; *SALT MARSHES; *WATER RESOURCES; *WETLANDS.

DESCRIPTIVE NOTE: 129P.

ABSTRACT: COMPILED IS A BIBLIOGRAPHY OF 129 ABSTRACTS FROM THE 1977- MAY 1979 NTIS DOCUMENT/DATA RECORDS DEALING WITH SALT MARSHES. TOPICS INCLUDE ECOLOGY, PRODUCTIVITY, POLLUTION EFFECTS, AND LAND USE EFFECTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE., OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $28.00.

IRIS ACCESSION NUMBER: EW004610

PUBLICATION DATE: MAR 79

TITLE: BENTHIC ANALYSIS TRAINING MANUAL.

PERSONAL AUTHOR: SMITH, KENNETH R.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *BENTHOS; *ECOLOGY; *ENVIRONMENTAL TECHNICIANS; FIELD STUDIES; *INSTRUCTIONAL MATERIALS; MANUALS; *MEASUREMENT TECHNIQUES; PARAPROFESSIONAL PERSONNEL; *POST SECONDARY EDUCATION; RESEARCH METHODOLOGY; *SAMPLING; ZOOLOGY.

DESCRIPTIVE NOTE: 76P.

ABSTRACT: PRESENTED IS A LECTURE MANUAL ON BENTHIC COMMUNITY ANALYSIS FOR TECHICIANS AND BIOLOGISTS WHO HAVE RESPONSIBILITY FOR COLLECTION, IDENTIFICATION, AND INTERPRETATION OF FINDINGS OF BENTHIC COMMUNITIES. INTENDED AS AN INTRODUCTORY APPROACH, TOPICS EMPHASIZE BENTHIC MACROINVERTEBRATE COMMUNITIES IN FRESH WATER, INCLUDING SAMPLING CONSIDERATIONS, TAXONOMIC ANALYSIS, SORTING TECHNIQUES, SAMPLING HANDLING, DATA PRESENTATION, AND INTERPRETATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004611

PUBLICATION DATE: 78

TITLE: ACROLEIN: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: *ACROLEIN; *AQUATIC ENVIRONMENT; *CRITERIA; *FEDERAL GOVERNMENT; GUIDELINES; OCEANOLOGY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 58P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ACROLEIN REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ACROLEIN ON PUBLIC HEALTH AND WELFARE, AQUATIC LIFE, AND RECREATION. PRESENTED ARE CRITERIA FOR THE PROTECTION OF FRESH WATER AND SALT WATER AQUATIC LIFE AND SAFE CONCENTRATIONS FOR HUMANS. IN THE CASE OF SUSPECT OR PROVEN CARCINOGENS, VARIOUS LEVELS OF INCREMENTAL CANCER RISK ARE INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE., OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004612

PUBLICATION DATE: 78

TITLE: PHENOL: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *FEDERAL GOVERNMENT; GUIDELINES; ORGANIC CHEMISTRY; *PHENOL; PUBLIC HEALTH; STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 88P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR PHENOL, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF PHENOL ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. PRESENTED ARE CRITERIA FOR FRESHWATER AQUATIC LIFE AND SAFE CONCENTRATIONS FOR HUMANS FROM PHENOL INGESTED THROUGH WATER AND CONTAMINATED AQUATIC ORGANISMS. NO CRITERION FOR SALT WATER AQUATIC LIFE CAN BE DERIVED USING THE GUIDELINES AND DATA ARE INSUFFICIENT TO ESTIMATE A CRITERION USING OTHER PROCEDURES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004613

PUBLICATION DATE: 78

TITLE: NAPHTHALENE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *CRITERIA; *FEDERAL GOVERNMENT; GUIDELINES; *NAPHTHALENE; ORGANIC CHEMISTRY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 88P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR NAPHTHALENE, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF NAPHTHALENE ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. NO CRITERIA CAN BE DERIVED USING THE GUIDELINES FOR NAPHTHALENE AND THERE IS INSUFFICIENT DATA TO ESTIMATE CRITERIA USING OTHER PROCEDURES. CRITERIA FOR THE PROTECTION OF HUMAN HEALTH FROM THE TOXIC PROPERTIES OF NAPHTHALENE INGESTED THROUGH WATER AND CONTAMINATED AQUATIC ORGANISMS ARE PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004614

PUBLICATION DATE: 78

TITLE: ACENAPHTHENE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: *ACENAPHTHENE; AQUATIC ENVIRONMENT; *CRITERIA; *FEDERAL GOVERNMENT; GUIDELINES; *OCEANOLOGY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA

DESCRIPTIVE NOTE: 45P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ACENAPHTHENE, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ACENAPHTHENE ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. PRESENTED ARE CRITERIA FOR SALTWATER AQUATIC LIFE AND HUMAN HEALTH THAT WERE DERIVED USING THE GUIDELINES. THE RECOMMENDATION FOR FRESHWATER ORGANISMS AS THE DATA BASE WAS INSUFFICIENT TO ALLOW USE OF THE GUIDELINES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE $5.25.

IRIS ACCESSION NUMBER: EW004615

PUBLICATION DATE: 78

TITLE: NITROPHENOLS: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *FEDERAL GOVERNMENT; GUIDELINES; *NITROPHENOLS; ORGANIC CHEMISTRY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 58P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR NITROPHENOLS, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF NITROPHENOLS ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. CRITERIA ARE IDENTIFIED FOR 2-NITROPHENOL, 4-NITROPHENOL, 2,4-DINITROPHENOL, 2,4-DINITRO-6-METHYLPHENOL AND 2,4,6-TRINITROPHENOL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.00.

IRIS ACCESSION NUMBER: EW004616

PUBLICATION DATE: 78

TITLE: DICHLOROPROPANES/DICHLOROPROPENES: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *DICHLOROPROPANES; *DICHLOROPROPENES; *FEDERAL GOVERNMENT; GUIDELINES; ORGANIC CHEMISTRY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 78P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR DICHLOROPROPANES AND DICHLOROPROPENES, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF THESE ORGANICS ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. CRITERIA ARE IDENTIFIED FOR 1,1-DICHLOROPROPANE, 1,2-DICHLOROPROPANE, 1,3-DICHLOROPROPANE AND 1,3-DICHLOROPROPANE. IF THE DATA BASE IS INSUFFICIENT TO ALLOW USE OF THE GUIDELINES, A CRITERION IS ESTIMATED USING OTHER PROCEDURES, IF POSSIBLE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004617

PUBLICATION DATE: 78

TITLE: DINITROTOLUENE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *DINITROTOLUENES; *FEDERAL GOVERNMENT; GUIDELINES; ORGANIC CHEMSITRY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 99P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR 2,3-DINITROTOLUENE AND 2,4-DINITROTOLUENE, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF DINITROTOLUENES. IF THE DATA BASE IS INSUFFICIENT TO ALLOW USE OF THE GUIDELINES, A CRITERION IS ESTIMATED USING OTHER PROCEDURES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.50.

IRIS ACCESSION NUMBER: EW004618

PUBLICATION DATE: 78

TITLE: ENDRIN: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *ENDRIN; *FEDERAL GOVERNMENT; GUIDELINES; ORGANIC CHEMISTRY; *PESTICIDES; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 96P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ENDRIN, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ENDRIN ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. CRITERIA ARE PRESENTED FOR THE PROTECTION OF FRESHWATER AND SALTWATER AQUATIC LIFE, AND HUMAN HEALTH FROM THE TOXIC PROPERITIES OF ENDRIN INJESTED THROUGH WATER AND CONTAMINATED AQUATIC ORGANISMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.50.

IRIS ACCESSION NUMBER: EW004619

PUBLICATION DATE: 78

TITLE: ENDOSULFAN: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *ENDOSULFAN; *FEDERAL GOVERNMENT; GUIDELINES; OCEANOLOGY; ORGANIC CHEMISTRY; *PESTICIDES; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 147P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ENDOSULFAN, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ENDOSULFAN ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. FOR SALTWATER AQUATIC LIFE, NO CRITERION FOR ENDOSULFAN CAN BE DERIVED USING THE GUIDELINES, AND THERE ARE INSUFFICIENT DATA TO ESTIMATE A CRITERION USING OTHER PROCEDURES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $7.25.

IRIS ACCESSION NUMBER: EW004620

PUBLICATION DATE: 78

TITLE: ETHYLBENZENE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *CRITERIA; *ETHYLBENZENE; *FEDERAL GOVERNMENT; GUIDELINES; OCEANOLOGY; ORGANIC CHEMISTRY; PUBLIC HEALTH; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 48P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ETHYLBENZENE, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ETHYLBENZENE ON HUMAN HEALTH 8 WELFARE AND AQUATIC LIFE. NO CRITERIA FOR ETHYLBENZENE CAN BE DERIVED FOR FRESHWATER AND SALTWATER AQUATIC LIFE USING THE GUIDELINES, AND THERE ARE INSUFFICIENT DATA TO ESTIMATE CRITERIA USING OTHER PROCEDURES. A CRITERION FOR THE PROTECTION OF HUMAN HEALTH FROM THE TOXIC PROPERTIES OF ETHYLBENZE INGESTED THROUGH WATER AND CONTAMINATED AQUATIC ORGANISMS IS PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $5.25.

IRIS ACCESSION NUMBER: EW004621

PUBLICATION DATE: 78

TITLE: ISOPHORONE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; *FEDERAL GOVERNMENT; *GUIDELINES; *ISOPHORONE; *OCEANOLOGY; ORGANIC CHEMISTRY; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY CRITERIA.

DESCRIPTIVE NOTE: 57P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ISOPHORONE, REFLECTING THE LASTEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ISOPHORONE ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. CRITERIA FOR SALTWATER, AQUATIC LIFE, AND THE PROTECTION OF HUMAN HEALTH AS DERIVED USING THE GUIDELINES ARE PRESENTED. THE DATA BASE FOR FRESHWATER AQUATIC LIFE IS INSUFFICIENT TO ALLOW USE OF THE GUIDELINES AND THE CRITERION IS INFERRED FROM TOXICITY DATA FOR SALTWATER ORGANISMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 2161. PRICE: $4.50.

IRIS ACCESSION NUMBER: EW004622

PUBLICATION DATE: 78

TITLE: ANTIMONY: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: *ANTIMONY; AQUATIC ENVIRONMENT; CHEMISTRY; *CRITERIA; FEDERAL GOVERNMENT; GUIDELINES; PUBLIC HEALTH; *STANDARDS; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *AMBIENT WATER QUALITY.

DESCRIPTIVE NOTE: 101P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR ANTIMONY, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF ANTIMONY ON HUMAN HEALTH AND WELFARE. CRITERIA ARE PROVIDED FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE AND HUMAN HEALTH. NO CRITERION FOR ANTIMONY CAN BE DERIVED USING THE GUIDELINES AND THERE ARE INSUFFICIENT DATA TO ESTIMATE A CRITERION USING OTHER PROCEDURES.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE $6.50.

IRIS ACCESSION NUMBER: EW004623

PUBLICATION DATE: 78

TITLE: TOXAPHENE: AMBIENT WATER QUALITY CRITERIA.

DESCRIPTOR: AQUATIC ENVIRONMENT; CARCINOGENS; *CRITERIA; *FEDERAL GOVERNMENT; GUIDELINES; INSECTICIDES; OCEANOLOGY; *PESTICIDES; PUBLIC HEALTH; *TOXAPHENE; TOXICOLOGY; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL; WATER QUALITY.

DESCRIPTIVE NOTE: 115P.

ABSTRACT: REPORTED ARE THE AMBIENT WATER QUALITY CRITERIA FOR TOXAPHENE, REFLECTING THE LATEST SCIENTIFIC KNOWLEDGE ON THE IDENTIFIABLE EFFECTS OF TOXOPHENE ON HUMAN HEALTH AND WELFARE AND AQUATIC LIFE. PRESENTED ARE CRITERIA FOR THE PROTECTION OF FRESHWATER AND SALT WATER AQUATIC LIFE AS DERIVED USING THE GUIDELINES. THE AMBIENT WATER CONCENTRATION FOR THE PROTECTION OF HUMAN HEALTH FROM THE POTENTIAL CARCINOGENIC EFFECTS OF EXPOSURE TO TOXAPHENE THROUGH INGESTION OF WATER AND CONTAMINATED AQUATIC

ORGANISMS IS ZERO. THE EPA IS CONSIDERING SETTING CRITERIA AT AN INTERIM TARGET RISK LEVEL.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.50.

IRIS ACCESSION NUMBER: EW004641

PUBLICATION DATE: JUL 79

TITLE: INSTITUTIONAL CONSTRAINTS ON LAND MANAGEMENT FOR WATER RESOURCE PROTECTION IN URBAN AND SUBURBAN WATERSHEDS.

PERSONAL AUTHOR: ZIMMERMAN, RAE.

DESCRIPTOR: CITY PLANNING; *CITY PROBLEMS; *COMMUNICATION; *ENVIRONMENT; GOVERNMENT ROLE; LAND USE; *MANAGEMENT; *NATURAL RESOURCES; PESTICIDES; *PUBLIC POLICY; *PLANNING; *URBAN AREAS; WATER POLLUTION CONTROL; WATER RESOURCES

DESCRIPTIVE NOTE: 88P.

ABSTRACT: THIS REPORT DISCUSSES AN INVESTIGATION OF THE CHANNELS OF COMMUNICATION BETWEEN LAND MANAGERS AND OTHER SECTORS OF GOVERNMENT RESPONSIBLE FOR ENVIRONMENTAL QUALITY. IT EXAMINES THE REASONS FOR FAILURE TO COMMUNICATE, OR TO ESTABLISH THIS LINKAGE. THE REPORT FURTHER INQUIRES INTO THE POSSIBILITY OF NETWORKING EXISTING AGENCIES TO EMPLOY EXISTING AGENCY AUTHORITY, ESPECIALLY THAT OF LAND MANAGEMENT AGENCIES, TO ACHIEVE MULTIPURPOSE AND SEEMINGLY CONFLICTING GOALS INVOLVING ENVIRONMENTAL QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004644

PUBLICATION DATE: JUL 78

TITLE: AN EVALUATION OF ALTERNATIVES AND COSTS FOR NONPOINT SOURCE CONTROLS IN THE UNITED STATES GREAT LAKES BASIN.

PERSONAL AUTHOR: SKIMIN, WILLIAM E; AND OTHERS.

DESCRIPTOR: *COST EFFECTIVENESS; *EVALUATION; *GREAT LAKES; *LAND USE; *NONPOINT SOURCE POLLUTION; *POLLUTION; *PLANNING; URBAN PROBLEMS; WATER TREATMENT; WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; WASTES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 351P.

ABSTRACT: THIS REPORT PRESENTS AN EVALUATION OF NONPOINT SOURCE PROBLEMS AFFECTING THE GREAT LAKES AND ESTIMATED COSTS FOR REMEDIAL CONTROL PROGRAMS. THESE TOPICS WERE CONSIDERED: URBAN, AGRICULTURAL, AND ON-SITE WASTE DISPOSAL. IN URBAN AREAS, THE PROBLEMS OF STORM RUNOFF WITH COMBINED SEWER OVERFLOW, CONSTRUCTION SITE RUNOFF AND RUNOFF CONTROLS FOR NEW DEVELOPMENTS WERE EVALUATED. IN AGRICULTURAL AREAS THE PROBLEMS OF EROSION, SEDIMENTATION, AND ANIMAL WASTE DISPOSAL WERE EVALUATED. THE EVALUATION OF ON-SITE WASTE DISPOSAL, WAS BASED ON ESTIMATES BY LOCAL HEALTH OFFICES AND PLANNING AGENCIES. COSTS OF VARIOUS CONTROL PROGRAMS FOR THE GREAT LAKES WERE ESTIMATED BY SELECTING COMBINATIONS OF CONTROL. FOUR ALTERNATIVE REMEDIAL STRATEGIES WERE DEFINED: (1) BASIN WIDE REMEDIAL MEASURES; (2) REMEDIAL MEASURES APPLIED THROUGHOUT THE POTENTIAL CONTRIBUTING AREA; (3) TREATMENT PRIORITIES BASED ON DIFFUSE SOURCE TRIBUTARY LOAD; AND (4) TREATMENT PRIORITIES BASED ON LOCAL NEARSHORE WATER QUALITY. THE FINAL PROPOSED STRATEGY WAS THAT BASED ON NEARSHORE WATER QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $12.50.

IRIS ACCESSION NUMBER: EW004646

PUBLICATION DATE: 79

TITLE: METAL PROCESSING WASTES. PART 2. WATER POLLUTION. VOLUME 2. 1978- MAY 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ECONOMICS; *HEALTH; INDUSTRY; *METALS; *METAL INDUSTRY; *PLANNING; *WASTEWATER TREATMENT; *WASTES; *WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 57P.

ABSTRACT: THIS BIBLIOGRAPHY IS AN UPDATE ON A PREVIOUS EDITION AND CONTAINS AN ADDITIONAL 59 ABSTRACTS OF ARTICLES ON WATER POLLUTION BY METAL PROCESSING WASTES. THE BIBLIOGRAPHY COVERS WATER POLLUTION CONTROL, PROCESSES, ABATEMENT, PLANNING, ECONOMICS AND HEALTH EFFECTS. THE REPORT ALSO FURNISHES INFORMATION ON ORDERING REPORTS, THEIR PRICES AND A SAMPLE CITATION FROM THE N.T.I.S. DATA BASE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $28.00.

IRIS ACCESSION NUMBER: EW004647

PUBLICATION DATE: 79

TITLE: MERCURY POLLUTION VOLUME 2. 1977-APRIL 1979. A BIBLIOGRAPHY WITH ABSTRACTS.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *AIR POLLUTION CONTROL; *ANALYTICAL TECHNIQUES; DATA ANALYSIS; *ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; EVALUATION; *MERCURY; *POLLUTION; *SAMPLING; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 78P.

ABSTRACT: THIS BIBLIOGRAPHY INCLUDES ANNOTATED ENTRIES OF REPORTS DEALING WITH MERCURY POLLUTION CONTROL, ENVIRONMENTAL SAMPLING AND ANALYSIS FOR MERCURY, AND AIR AND WATER QUALITY DATA RELATIVE TO MERCURY POLLUTION. TOXICITY AND POLLUTION EFFECTS ARE NOT INCLUDED. THIS UPDATED BIBLIOGRAPHY CONTAINS 77 ABSTRACTS, 22 OF WHICH ARE NEW

ENTRIES SINCE THE PREVIOUS EDITION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $28.00.

IRIS ACCESSION NUMBER: EW004648

PUBLICATION DATE: 78

TITLE: METAL PROCESSING WASTES. PART 2. WATER POLLUTION . VOLUME 1. 1970-1977. A BIBLIOGRAPHY WITH ABSTRACTS.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; ECONOMICS; *INDUSTRY; *METAL INDUSTRY; *METALS; PLANNING; *WASTEWATER TREATMENT; *WASTES; *WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 210P.

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS 209 ABSTRACTS OF ARTICLES ON WATER POLLUTION FROM PROCESSING WASTES. THE BIBLIOGRAPHY COVERS WATER POLLUTION CONTROL, PROCESSES, AND ABATEMENT PLANNING ECONOMICS OF METAL PROCESSING. SOME OF THE SOURCES INCLUDE METAL WORKING, SMELTING, REFIRING AND FINISHING. THE REPORT ALSO FURNISHES INFORMATION ON ORDERING REPORTS, THEIR PRICES AND A SAMPLE CITATION FROM THE N.T.I.S. DATA BASE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $28.00.

IRIS ACCESSION NUMBER: EW004651

PUBLICATION DATE: FEB 79

TITLE: NEEDS SURVEY (1978): CONTINUOUS STORMWATER POLLUTION SIMULATION SYSTEM-USERS MANUAL.

PERSONAL AUTHOR: WYCOFF, RONALD L; MARA, MICHAEL J.

DESCRIPTOR: BOD; DISSOLVED OXYGEN; INFILTRATION; LEAD; *MODELS; *NEEDS ASSESSMENT; NITROGEN; POLLUTION; *PLANNING; RAINFALL; SEWERS; SOLID WASTES; *SURVEYS; *SIMULATION; *WATER RUNOFF; *URBAN AREAS; *URBAN ENVIRONMENT; WASTEWATER COLLECTION; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT; WATER QUALTIY.

DESCRIPTIVE NOTE: 211P.

ABSTRACT: A SIMPLIFIED RAINFALL/RUNOFF/RECEIVING WATER QUALITY RESPONSE SIMULATION MODEL IS PRESENTED. THE PURPOSE OF THIS MODEL IS TO SIMULATE ALL MAJOR URBAN POLLUTION SOURCES IN A SIMPLE, YET NATIONAL MANNER. THE MODEL PROVIDES LONG-TERM SIMULATION OF THE URBAN SYSTEM AT MODERATE COST. PROCESSES SIMULATED INCLUDE RAINFALL, DIRECT RUNOFF, WATERSHED POLLUTION ACCUMULATION AND WASHOFF, SEWER SYSTEM INFILTRATION, STORAGE/TREATMENT SYSTEMS FOR WET-WEATHER FLOW, DRY WEATHER WASTEWATER TREATMENT PLANT EFFLUENT, UPSTREAM FLOW, AND RECEIVING WATER QUALITY RESPONSE TO THE COMBINED EFFECTS OF ALL THE ABOVE POLLUTION SOURCES. POLLUTANTS CONSIDERED ARE BIOCHEMICAL OXYGEN DEMAND, TOTAL KJELDAHL NITROGEN, SUSPENDED SOLIDS AND LEAD. RECEIVING WATER RESPONSES SIMULATED INCLUDED SUSPENDED SOLIDS CONCENTRATIONS, MINIMUM DISSOLVED OXYGEN CONCENTRATIONS, AND TOTAL AND DISSOLVED LEAD CONCENTRATIONS. THE SIMULATION PROVIDES A PLANNING TOOL WHICH MAY BE USED TO EVALUATE THE LONG-TERM WATER QUALITY IMPACTS OF VARIOUS WATER QUALITY MANAGEMENT ALTERNATIVES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.25.

IRIS ACCESSION NUMBER: EW004652

PUBLICATION DATE: JUL 78

TITLE: ENVIRONMENTAL MANAGEMENT STRATEGY FOR THE GREAT LAKES SYSTEM.

DESCRIPTOR: DECISION MAKING; *GREAT LAKES; GROUNDWATER; *INTERNATIONAL STUDIES; LAKES; *LAND USE; MANAGEMENT; *NONPOINT SOURCE POLLUTION; *PLANNING; POLLUTION; PESTICIDES; *RESEARCH; SURFACE RUNOFF; *WATER RESOURCES; *WATER POLLUTION CONTROL; WASTES; WASTE DISPOSAL

DESCRIPTIVE NOTE: 114P.

ABSTRACT: STUDIED WERE NONPOINT SOURCES OF POLLUTANTS, INCLUDING SURFACE RUNOFF FROM ALL LAND USES AND GROUNDWATER INFLOWS FROM THE ENTIRE GREAT LAKES BASIN. ATMOSPHERIC LOADS WERE ALSO EVALUATED TO DETERMINE THEIR MAGNITUDE, RELATIVE TO THE TOTAL POLLUTANT LOAD OF THE GREAT LAKES. THREE MAIN ACTIVITIES WERE INVOLVED IN THE STUDY: (1) ANALYSIS OF THE CURRENT STATE-OF-THE-ART OF POLLUTION CONTROL AND METHODOLOGY; (2) DETERMINING LAND USES IN THE GREAT LAKES BASIN WITH AN EMPHASIS ON CERTAIN TRENDS TO 1980; AND (3) THE ASSESSING THE DEGREE OF IMPROVEMENT OF THE WATER QUALITY OF THE GREAT LAKES. AN OVERVIEW MODEL WAS DEVELOPED TO INTERGRATE THE DATA ON LAND-USE RELATED POLLUTANTS. MECHANISMS TO EVALUATE THE POTENTIAL IMPACT AND COSTS OF STRATEGIES TO CONTROL NONPOINT SOURCES TO PROVIDE FOR MANAGEMENT DECISIONS WERE DEVELOPED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.50.

IRIS ACCESSION NUMBER: EW004654

PUBLICATION DATE: 78

TITLE: WATER, WATER EVERYWHERE.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CROSS CONNECTIONS; *EQUIPMENT; *FILMS; HYDRAULICS; *INSTRUCTIONAL MATERIALS; *PLUMBING; *POST SECONDARY EDUCATION; PUBLIC HEALTH; TECHNICAL EDUCATION; *WATER SUPPLY; *WATER POLLUTION CONTROL; WATER QUALITY

DESCRIPTIVE NOTE: 16 MM SOUND, COLOR-14 MINUTE FILM

ABSTRACT: EXAMINED IS THE CONCEPT OF CROSS CONNECTIONS AND PREVENTING BACK-SIPHONAGE IN PLUMBING. EXAMPLES OF CONTAMINATION BY CROSS CONNECTIONS AND RECOMMENDATIONS TO PREVENT BACK-SIPHONAGE ARE PRESENTED. METHODS TO PREVENT BACK-SIPHONAGE BY CROSS CONNECTIONS ARE ILLUSTRATED AND DISCUSSED. INCLUDED ARE AIR-GAPS, R. P. DEVICES, DOUBLE CHECK VALVES, AND VACUUM BREAKERS. MAINTENANCE TECHNIQUES ARE DETAILED.

AVAILABILITY: UNIVERSITY OF CALIFORNIA, LOS ALAMOS SCIENTIFIC LABORATORY, LOS ALAMOS, NEW MEXICO 87545. (ON LOAN-FREE OF CHARGE).

IRIS ACCESSION NUMBER: EW004653

PUBLICATION DATE: 80

TITLE: TOXIC AND HAZARDOUS WASTE DISPOSAL. VOLUME THREE. IMPACT OF LEGISLATION AND IMPLEMENTATION ON DISPOSAL MANAGEMENT PRACTICES.

PERSONAL AUTHOR: POJASEK, ROBERT B.

DESCRIPTOR: *CONFERENCE PAPERS; FEDERAL GOVERNMENT; *GOVERNMENT ROLE; *HAZARDOUS WASTES; INDUSTRY; INTERNATIONAL APPROACH; *LEGISLATION; MANAGEMENT; METALS; REGULATIONS; *SYMPOSIA; TECHNOLOGY; TOXIC SUBSTANCES; *WASTE DISPOSAL; *WORLD PROBLEMS.

DESCRIPTIVE NOTE: 205P.

ABSTRACT: THIS VOLUME, THE THIRD IN A SERIES OF SIX IS A COLLECTION OF 16 PAPERS PRESENTED AT THE INTERNATIONAL HAZARDOUS WASTE DISPOSAL SYMPOSIUM HELD IN HONOLULU, HAWAII IN 1979. COVERED ARE THE UNITED STATES REGULATORY PROGRAM, RELATED EUROPEAN EXPERIENCES AND JAPANESE TECHNOLOGY.

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, INC., P. O. BOX 1425, ANN ARBOR, MI 48106. PRICE: $36.00.

IRIS ACCESSION NUMBER: EW004656

PUBLICATION DATE: 76

TITLE: HANDBOOK OF TASTE AND ODOR CONTROL EXPERIENCES IN THE UNITED STATES AND CANADA.

DESCRIPTOR: CASE STUDIES; FEDERAL GOVERNMENT; *MEETINGS; *MUNICIPALITIES; *ODOR; REGULATION; RESEARCH; *SURVEYS; *TASTE; TECHNOLOGY; *UTILITIES (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 100P.

ABSTRACT: THIS HANDBOOK EMBODIES THE REPORTS PRESENTED BY 24 PARTICIPANTS AT A 2-DAY MEETING CONVENED TO CONSIDER TASTE AND ODOR RELATED TO WATER TREATMENT. ALSO PRESENTED ARE THE RESULTS OF A SURVEY QUESTIONNAIRE MAILED TO 200 WATER UTILITIES LOCATED THROUGHOUT THE UNITED STATES AND CANADA INVITING INFORMATION ON THE NATURE OF THE TASTE AND ODOR PROBLEMS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, 6666 WEST QUINCY AVENUE, DENVER, CO 80235. PRICE: $18.00.

IRIS ACCESSION NUMBER: EW004657

PUBLICATION DATE: 79

TITLE: MIXING IN INLAND AND COASTAL WATERS.

PERSONAL AUTHOR: FISCHER, HUGO B.; AND OTHERS.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *ENGINEERING; ESTUARIES; *FLUID MECHANICS; *HIGHER EDUCATION; *HYDRAULICS; HYDROLOGY; *INSTRUCTIONAL MATERIALS; MANAGEMENT; *MIXING; MODELS; RESERVOIRS; RIVERS; WATER POLLUTION CONTROL; WATER RESOURCES.

DESCRIPTIVE NOTE: 484P.

ABSTRACT: DESIGNED FOR FIRST YEAR GRADUATE LEVEL COURSES FOR ENGINEERING AND SCIENCE STUDENTS, THIS VOLUME APPLIES MODERN FLUID MECHANICS TO THE PROBLEMS OF POLLUTANT TRANSPORT AND MIXING IN THE WATER ENVIRONMENT. AN UNDERSTANDING OF CALCULUS UP TO PARTIAL DIFFERENTIAL EQUATIONS IS ASSUMED. TOPICS INCLUDE FICKIAN AND TURBULENT DIFFUSION; SHEAR FLOW DISPERSION; MIXING IN RIVERS, RESERVOIRS, AND ESTUARIES; RIVER AND ESTUARY MODELS; TURBULENT JETS AND PLUMES; AND DESIGN OF OCEAN WASTEWATER DISCHARGE SYSTEMS.

AVAILABILITY: ACADEMIC PRESS, INC., 111 FIFTH AVENUE, NEW YORK, NY 10003. PRICE: $29.75.

IRIS ACCESSION NUMBER: EW004659

PUBLICATION DATE: 79

TITLE: BIOLOGICAL INDICATORS OF WATER QUALITY.

PERSONAL AUTHOR: JAMES, A.; EVISON, LILIAN.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BIOLOGICAL INDICATORS; *CHEMICAL ANALYSIS; *CONFERENCE PAPERS; DRINKING WATER; ENVIRONMENTAL ASSESSMENT; EVALUATION; *MEASUREMENT; *MICROBIOLOGY; *PUBLIC HEALTH; RIVERS; RECREATION; *WATER RESOURCES; *WATER POLLUTION CONTROL; *WATER QUALITY; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 628P.

ABSTRACT: THIS DOCUMENT STRESSES THE ROLE OF BIOLOGICAL INDICATORS IN THE ASSESSMENT OF WATER QUALITY. SURVEYED ARE THE QUALITY REQUIREMENTS FOR THE VARIOUS USES OF WATER, SUCH AS SUPPLY, FISHING AND RECREATION. THE VARIOUS WAYS IN WHICH BIOLOGICAL SYSTEMS OF CLASSIFICATION HAVE BEEN DEVELOPED ARE DISCUSSED. TOPICS RANGE FROM PHYSIOLOGICAL TESTS TO DIVERSITY INDICES AND THE SPECTRUM OF ORGANISMS FROM BACTERIA TO FISH. STRESSED ARE THE PRACTICAL VALUE OF THE BIOLOGICAL METHODS AND THEIR RELATIONSHIP TO CHEMICAL AND PHYSICAL ALTERNATIVES. CONTENT IS BASED ON EXPERIENCES FROM

EUROPE, THE UNITED KINGDOM, AND NORTH AMERICA.
AVAILABILITY: JOHN WILEY AND SONS, INC., ONE WILEY DRIVE, SOMERSET, NJ 08873. PRICE: $41.25.

IRIS ACCESSION NUMBER: EW004661

PUBLICATION DATE: AUG 73

TITLE: LOGGING AND WATER QUALITY.

PERSONAL AUTHOR: HARR, L.

DESCRIPTOR: *AUDIOVISUAL AIDS; EROSION; *FORESTRY; *INSTRUCTIONAL MATERIALS; MANAGEMENT; NONPOINT SOURCE POLLUTION; *OPERATIONS (LOGGING); *OREGON; *POST SECONDARY EDUCATION; TECHNICAL EDUCATION; WATER POLLUTION CONTROL; *WATER QUALITY; WATER RESOURCES.

DESCRIPTIVE NOTE: 23 MINUTES-106 SLIDES

ABSTRACT: EXAMINED IN THIS SLIDE-TAPE PROGRAM ARE SPECIFIC WATER QUALITY PROBLEMS COMMON TO FOREST LAND IN OREGON AND HOW THESE PROBLEMS ARE INFLUENCED BY LOGGING ACTIVITIES. MANAGEMENT TECHNIQUES TO CONTROL EROSION AND ITS PROCESSES ARE PRESENTED. WATER QUALITY PARAMETERS DISCUSSED INCLUDE TURBIDITY, TEMPERATURE, NUTRIENTS AND DISSOLVED OXYGEN.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #684.

IRIS ACCESSION NUMBER: EW004662

PUBLICATION DATE: JUN 74

TITLE: FOREST STREAM CONTAMINATION FROM CHEMICAL BRUSH CONTROL OPERATIONS.

PERSONAL AUTHOR: NORRIS, LOGAN.

DESCRIPTOR: *AUDIOVISUAL AIDS; CHEMICAL APPLICATION; *FORESTRY; *GUIDELINES; *HERBICIDES; MANAGEMENT; *NONPOINT SOURCE POLLUTION; PESTICIDES; POLICY FORMATION; *POST SECONDARY EDUCATION; SPRAYING; STREAMS; TECHNICAL EDUCATION; WATER POLLUTION CONTROL; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 16 MUNUTES-60 SLIDES.

ABSTRACT: PRESENTED IN THE SLIDE-TAPE PROGRAM ARE GUIDELINES FOR THE LAND MANAGER DETAILING THE SAFE APPLICATION OF CHEMICALS AND INFORMATION TO PROVIDE THE SCIENTIFIC BASIS NECESSARY FOR THE FORMULATION OF SOUND FOREST SPRAY POLICIES.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #740.

IRIS ACCESSION NUMBER: EW004663
PUBLICATION DATE: JUN 78

TITLE: THE VALUE OF SMALL FOREST STREAMS.

PERSONAL AUTHOR: WINGATE, GEORGE.

DESCRIPTOR: *AUDIOVISUAL AIDS; *FORESTRY; *INSTRUCTIONAL MATERIALS; NONPOINT SOURCE POLLUTION; OPERATIONS (LOGGING); PACIFIC NORTHWEST; PLANNING; *POST SECONDARY EDUCATION; *STREAMS; TECHNICAL EDUCATION; WATER QUALITY; *WATER RESOURCES; WATERSHEDS.

DESCRIPTIVE NOTE: 43 SLIDES-5 MUNUTES.

ABSTRACT: EXAMINED IN THIS SLIDE-TAPE PROGRAM ARE TYPICAL SMALL STREAMS OFF THE COAST RANGES OF WASHINGTON AND OREGON. INVESTIGATED ARE VARIABLES THAT AFFECT STREAM FLOW, THE ANNUAL CYCLE OF A STREAM, AND THE PLANNING OF FORESTRY OPERATIONS TO HAVE THE LEAST IMPACT ON WATER QUALITY.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #778.

IRIS ACCESSION NUMBER: EW004664

PUBLICATION DATE: OCT 72

TITLE: FOREST PRACTICES AND STREAMFLOW.
PERSONAL AUTHOR: HARR, R. DENNIS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *FORESTRY; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; LAND USE; MANAGEMENT; MEASUREMENT; *POST SECONDARY EDUCATION; *OREGON; WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: 34 MINUTES-78 SLIDES.

ABSTRACT: PRESENTED ON THIS SLIDE-TAPE PROGRAM IS BASIC INFORMATION ABOUT FOREST HYDROLOGY AND THE RELATIONSHIP BETWEEN FOREST LAND USE AND STREAMFLOW. TOPICS INCLUDE THE HYDROLOGIC CYCLE, FORMS OF PRECIPITATION AND ITS MEASUREMENT, INFILTRATION, WATERSHED CHARACTERISTICS AND EVAPOTRANSPIRATION. FOREST ACTIVITIES AFFECTING THE QUANTITY AND TIMING OF STREAM FLOW ARE DETAILED.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #653.

IRIS ACCESSION NUMBER: EW004665

PUBLICATION DATE: NOV 77

TITLE: SILVICULTURAL USE OF HERBICIDES IN PACIFIC NORTHWEST FORESTS.

PERSONAL AUTHOR: GRATKOWSKI, HANK.
DESCRIPTOR: *AUDIOVISUAL AIDS; CHEMICAL APPLICATION (PESTICIDES); FORESTRY; *HERBICIDES; *INSTRUCTIONAL MATERIALS; MANAGEMENT; *NONPOINT SOURCE POLLUTION; PESTICIDES; *POST SECONDARY EDUCATION; REFORESTATION; *SILVICULTURE; SPRAYING; TECHNICAL EDUCATION; *PACIFIC NORTHWEST.

DESCRIPTIVE NOTE: 30 MINUTES-80 SLIDES.

ABSTRACT: DISCUSSED IN THIS SLIDE-TAPE PROGRAM ARE METHODS OF CLEARING BRUSH FIELDS FOR REFORESTATION, WITH EMPHASIS PLACED ON THE AERIAL APPLICATION OF HERBICIDES. GUIDELINES ARE SPECIFIED FOR THE HERBICIDE TO BE USED, AMOUNT OF HERBICIDE TO BE APPLIED PER ACRE, VOLUME OF SPRAY PER ACRE, THE CARRIER, AND SEASON OF APPLICATION.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #775.

IRIS ACCESSION NUMBER: EW004666

PUBLICATION DATE: JAN 77

TITLE: THE FORESTER'S CHEMICAL TOOL KIT, PART I.

PERSONAL AUTHOR: NEWTON, MIKE.

DESCRIPTOR: *AUDIOVISUAL AIDS; CHEMISTRY; FORESTRY; *HERBICIDES; *INSTRUCTIONAL MATERIALS; *MANAGEMENT; NONPOINT SOURCE POLLUTION; PESTICIDES; *POST SECONDARY EDUCATION; *SILVICULTURE; TECHNICAL EDUCATION; *BRUSH CONTROL.

DESCRIPTIVE NOTE: 19 MUNUTE SLIDE PRESENTATION.

ABSTRACT: DESCRIBED IN THIS SLIDE-TAPE PROGRAM ARE SOME OF THE HERBICIDES USED BY FORESTERS TO MINIMIZE THE EFFECTS OF BRUSH. FACTORS TO BE CONSIDERED BEFOR SELECTING A HERBICIDE FOR A PARTICULAR BRUSH PROBLEM ARE DETAILED. THESE FACTORS INCLUDE HERBICIDE ACTIVE INGREDIENTS, CHEMICAL AND PHYSICAL PROPERTIES, AND THE SPECIES THE HERBICIDE CONTROLS.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 ON LOAN, SLIDE TAPE 705.3.

IRIS ACCESSION NUMBER: EW004667

PUBLICATION DATE: 77

TITLE: THE FORESTER'S CHEMICAL TOOL KIT, PART II.

PERSONAL AUTHOR: NEWTON, MIKE.

DESCRIPTOR: *AUDIOVISUAL AIDS; CHEMISTRY; FORESTRY; *HERBICIDES; *INSTRUCTIONAL MATERIALS; *MANAGEMENT; NONPOINT SOURCE POLLUTION; PESTICIDES; *POST SECONDARY EDUCATION; *SILVICULTURE; TECHNICAL EDUCATION; *INJECTION CHEMICALS

DESCRIPTIVE NOTE: 70 SLIDES-16 MUNUTES.
ABSTRACT: EXAMINED IN THIS SLIDE-TAPE PROGRAM ARE THE USE OF HERBICIDES TO CONTROL HERBACEOUS PLANTS AND INJECTION APPLICATION OF CHEMICALS TO CONTROL LARGE WEED TREES. EXAMINED IN DETAIL ARE ATRAZINE, DALAPON, AMITRALE, SILVEX, SIMAZINE, 2,4-D, AND 2,4,5-T. INFECTION CHEMICALS EXAMINED INCLUDE PICLORAM, ORGANIC ARSENICALS, MSMA, AND CACODYLIC ACID.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #705.4.

IRIS ACCESSION NUMBER: EW004668

PUBLICATION DATE: FEB 77

TITLE: SOME ENVIRONMENTAL IMPACTS OF BRUSHFIELD CONTROL PRACTICES.

PERSONAL AUTHOR: NEWTON, MIKE.

DESCRIPTOR: *AUDIOVISUAL AIDS; BURNING; *ENVIRONMENTAL INFLUENCES; FORESTRY; *GUIDELINES; HERBICIDES; *INSTRUCTIONAL MATERIALS; MANAGEMENT; NONPOINT SOURCE POLLUTION; PESTICIDES; *POST SECONDARY EDUCATION; SCARIFICATION; *SILVICULTURE; TECHNICAL EDUCATION; *BRUSH CONTROL.

DESCRIPTIVE NOTE: 59 SLIDES-15 MINUTES.

ABSTRACT: EXAMINED IN THIS SLIDE-TAPE PROGRAM ARE THE CHARACTERISTICS OF BRUSH CONTROL METHODS CAUSING ENVIRONMENTAL IMPACTS. GUIDELINES FOR MINIMIZING THE ADVERSE EFFECTS OF THESE METHODS ARE PRESENTED. METHODS INCLUDE SCARIFICATION, FIRE, AND HERBICIDES.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331. $15.00 RENTAL FEE-SLIDE TAPE #705.6.

IRIS ACCESSION NUMBER: EW004669

PUBLICATION DATE: 74

TITLE: MONTANA WATER QUALITY BIBLIOGRAPHY 1974.

PERSONAL AUTHOR: BURNETT, G. W.; BOTZ, M. K.

DESCRIPTOR: ADMINISTRATION; *BIBLIOGRAPHIES; BIOLOGY; CHEMISTRY; ENVIRONMENT; LEGISLATION; MONTANA; POLLUTION; *PLANNING; RIVERS; STANDARDS; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 70P.

ABSTRACT: CITES STUDIES ON PHYSICAL, CHEMICAL AND BIOLOGICAL PARAMETERS RELATING TO WATER QUALITY; ALSO INCLUDES REFERENCE ON ADMINISTRATIVE PLANNING, REGULATION

AND LEGISLATION. CITATIONS ARE SUBDIVIDED INTO ACADEMIC STUDIES, JOURNAL/BOOK ARTICLES AND GOVERNMENT PUBLICATIONS. A LIBRARY LOCATION LISTING AND A THREE-WAY CROSS INDEXING (UNDER RIVER BASIN, GEOGRAPHIC NAME AND SUBJECT) ARE INCLUDED.

AVAILABILITY: WATER QUALITY BUREAU, ENVIRONMENTAL SCIENCES DIVISION, MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCE, HELENA, MONTANA. FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004670

PUBLICATION DATE: 77

TITLE: MONTANA WATER QUALITY BIBLIOGRAPHY-1974-SUMMER 1977.

PERSONAL AUTHOR: DONAGUE, JOHN J.

DESCRIPTOR: ADMINSTRATION; *BIBLIOGRAPHIES; BIOLOGY; CHEMISTRY; ENVIRONMENT; LEGISLATION; *MONTANA; POLLUTION; *PLANNING; *RIVERS; STANDARDS; *WATER QUALITY; *WATER POLLUTION CONTROL; WATER RESOURCES; WASTE DISPOSAL

DESCRIPTIVE NOTE: 65P.

ABSTRACT: INCLUDED ARE STUDIES ON PHYSICAL, CHEMICAL AND BIOLOGICAL PARAMETERS RELATING TO WATER QUALITY. ALSO INCLUDED ARE REFERENCES ON ADMINISTRATION, PLANNING, REGULATIONS, AND LEGISLATION. CITATIONS ARE SUBDIVIDED INTO ACADEMIC STUDIES, JOURNAL/BOOK ARTICLES, AND GOVERNMENT PUBLICATIONS. A LISTING OF LIBRARY LOCATIONS, A THREE WAY CROSS INDEXING, (UNDER RIVER BASIN, GEOGRAPHIC NAME, AND SUBJECT) ARE INCLUDED.

AVAILABILITY: WATER QUALITY BUREAU, ENVIRONMENTAL SCIENCES DIVISION, MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES, HELENA, MONTANA. FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004671

PUBLICATION DATE: 78

TITLE: WEED CONTROL METHODS FOR RIVER BASIN MANAGEMENT.

PERSONAL AUTHOR: GANGSTAD, EDWARD O.

DESCRIPTOR: *AQUATIC ENVIRONMENT; ECOLOGY; HERBICIDES; *MANAGEMENT; *RESEARCH REVIEWS; *RESEARCH; *RIVERS; WATER RESOURCES; *WATERSHEDS; *WEED CONTROL; *WEEDS

DESCRIPTIVE NOTE: 231P.

ABSTRACT: PRESENTED IS A SCIENTIFICALLY DOCUMENTED TREATISE OF THE KNOWN FACTS AS THEY APPLY TO THE CONTROL OF AQUATIC WEEDS IN RIVER BASINS AND THEIR ALLIED WATERWAYS. RESEARCH AND DEVELOPMENT OF THE PAST THREE DECADES ARE REVIEWED. LABORATORY AND FIELD STUDIES ARE LIMITED TO ALLIGATOR WEED AND WATER HYACINTH.

AVAILABILITY: CRC PRESS, INC., 2000 N.W. 24TH STREET, BOCA RATON, FL 33431. PRICE: $59.95.

IRIS ACCESSION NUMBER: EW004672

PUBLICATION DATE: 79

TITLE: 1979 BIBLIOGRAPHY OF SMALL WASTEWATER FLOWS.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; DESIGN; *FACILITIES; *OPERATIONS (WASTEWATER); *RURAL AREAS; TECHNOLOGY; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT; WATER RESOURCES; *WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 142P.

ABSTRACT: CONTAINS TECHNICAL AND NONTECHNICAL STUDIES RELEVANT TO SMALL INNOVATIVE AND ALTERNATIVE WASTEWATER TREATMENT AND COLLECTION SYSTEMS.

AVAILABILITY: WEST VIRGINIA UNIVERSITY, BOOKSTORE, MOUNTAIN LAIR, MORGANTOWN, WV 26505. PRICE: $7.00.

INSTITUTION NAME: EPA SMALL WASTEWATER FLOWS CLEARINGHOUSE.

IRIS ACCESSION NUMBER: EW004673

PUBLICATION DATE: 79

TITLE: CHEMICAL CONTAMINATION IN THE HUMAN ENVIRONMENT.

PERSONAL AUTHOR: LIPPMANN, MORTON; SCHLESINGER, RICHARD B.

DESCRIPTOR: BIOLOGICAL SCIENCES; *CHEMICALS; CHEMICAL CONTAMINANTS; *ENVIRONMENT; EARTH SCIENCES; ECOLOGY; MEDICINE; PHOTOCHEMICAL REACTIONS; *POLLUTION; *PUBLIC HEALTH; *PUBLIC WELFARE; PHYSICAL ENVIRONMENT; *TOXICOLOGY; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 456P.

ABSTRACT: EXAMINED ARE PHYSICAL, CHEMICAL AND BIOLOGICAL PROCESSES DETERMINING THE RELEASE, BEHAVIOUR, FATE AND EFFECTS OF CHEMICALS IN THE ENVIRONMENT. DISCUSSES CONTAMINATION AND ENVIRONMENTAL TOXICOLOGY FROM A HISTORICAL PERSPECTIVE, FOCUSING ON POTENTIAL EFFECTS ON HUMAN HEALTH AND WELFARE. INCLUDES THE MEASUREMENT AND EVALUATION OF ENVIRONMENTAL QUALITY, ALSO POSSIBLE CONTROL STRATEGIES.

AVAILABILITY: OXFORD UNIVERSITY PRESS, INC., 1600 POLLITT DRIVE, FAIRLAWN, NJ 07140. PRICE: $25.00-ESTIMATED.

IRIS ACCESSION NUMBER: EW004676

PUBLICATION DATE: MAR 80

TITLE: UNDERGROUND RESERVOIRS CAN CONTROL STORMWATER OVERFLOWS.

PERSONAL AUTHOR: SHERWOOD, GREGORY; AND OTHERS.

DESCRIPTOR: COST EFFECTIVENESS; *DESIGN; *FACILITIES; MANAGEMENT; MUNICIPALITIES; *OPERATIONS (WASTEWATER); *STORMWATER STORAGE; WASTEWATER TREATMENT; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 41-43P.

ABSTRACT: DESCRIBED IS THE DESIGN, DEVELOPMENT AND USE OF UNDERGROUND COVERED STORAGE RESERVOIRS IN PEORIA, ILLINOIS, TO PROVIDE STORMWATER STORAGE AND TREATMENT.

AVAILABILITY: AMERICAN CITY AND COUNTY; V95 N3.

IRIS ACCESSION NUMBER: EW004692

PUBLICATION DATE: MAR 80

TITLE: VIEW-POINT. IMPLEMENTATION OF THE SAFE WATER DRINKING ACT. SOUTH CAROLINA'S APPROACH AND GEORGIA'S APPROACH.

PERSONAL AUTHOR: SHAW, ROBERT L.; BYERS, ROBERT H.

DESCRIPTOR: *DRINKING WATER; *GEORGIA; GOVERNMENT ROLE; PLANNING; *PUBLIC HEALTH; *REGULATIONS; STANDARDS; *STATE IMPLEMENTATION PLANS; *STATE PROGRAMS; *SOUTH CAROLINA; *WATER SUPPLY; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 16-17P.
ABSTRACT: EXAMINED ARE THE APPROACHES UTILIZED BY TWO SOUTHERN STATES TO ASSURE MAINTENANCE OF THE LEADERSHIP ROLE IN REGULATING THE WATER SUPPLY INDUSTRY. WITH THE PASSAGE OF THE SAFE DRINKING WATER ACT IN 1974, BOTH GEORGIA AND SOUTH CAROLINA REQUESTED AND RECEIVED PRIMARY ENFORCEMENT RESPONSIBILITY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004693

PUBLICATION DATE: MAR 80

TITLE: MANAGEMENT AND OPERATIONS. PUBLIC NOTIFICATION: PAIN OR PANACEA.

PERSONAL AUTHOR: BRUBOLD, WILLIAM H.; GASTON, JOHN M.

DESCRIPTOR: ACCOUNTABILITY; *CALIFORNIA; *CONSUMER PROTECTION; DRINKING WATER; FEDERAL GOVERNMENT; GOVERNMENT ROLE; *MANAGEMENT; *MUNICIPALITIES; OPERATIONS (WATER SUPPLY); PUBLIC HEALTH; *PUBLIC NOTIFICATION; *SURVEYS; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 124-127P.

ABSTRACT: EIGHT CALIFORNIA COMMUNITIES WERE SURVEYED TO: (1) ESTIMATE THE PERCENTAGE OF CONSUMERS WHO KNOWINGLY RECEIVED NOTIFICATION AND UNDERSTOOD THE PROBLEM; (2) EVALUATE THE GENERAL VALUE OF NOTIFICATION; AND (3) DEVELOP RECOMMENDATIONS REGARDING THE METHOD AND CONTENT OF FUTURE CONSUMER NOTIFICATIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004694

PUBLICATION DATE: MAR 80

TITLE: THE EFFECTS OF WATER CONSERVATION KITS ON WATER USE.

PERSONAL AUTHOR: MORGAN, W. DOUGLAS; PELOSI, PETER.

DESCRIPTOR: *CALIFORNIA; *CONSERVATION (ENVIRONMENT); COST EFFECTIVENESS; *KITS (WATER CONSERVATION); *MUNICIPALITIES; *PUBLIC INVOLVEMENT; RESEARCH; *SURVEYS; UTILITIES; *WATER RESOURCES; *WATER USE; *WATER SUPPLY

DESCRIPTIVE NOTE: 131-133P.

ABSTRACT: DETAILED ARE THE RESULTS OF A WATER CONSERVATION CAMPAIGN IN OXNARD, CALIFORNIA. THE CITY DISTRIBUTED A WATER CONSERVATION KIT FREE OF CHARGE TO A LARGE GEOGRAPHIC AREA AND DETERMINED THE IMPCT OF THESE KITS ON WATER SAVINGS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004695

PUBLICATION DATE: MAR 80

TITLE: DIRECT FILTRATION TREATMENT PLANTS: COSTS AND CAPABILITIES.

PERSONAL AUTHOR: LOGSDON, GARY S.; AND OTHERS.

DESCRIPTOR: CONSTRUCTION; *CONSTRUCTION COSTS; *COST EFFECTIVENESS; DESIGN; *DRINKING WATER; *ECONOMICS; *FACILITIES; *FILTRATION; MANAGEMENT; OPERATIONS (WATER TREATMENT); *UTILITIES; *WATER TREATMENT; *WATER SUPPLY; WATER QUALITY

DESCRIPTIVE NOTE: 134-147P.

ABSTRACT: PROVIDED ARE (1) INFORMATION ON CONSTRUCTION AND OPERATING COSTS OF DIRECT FILTRATION PLANTS; (2) REASONS FOR DIFFERENCES IN THE COST OF CONSTRUCTING FILTRATION PLANTS; AND (3) A DISCUSSION OF THE TREATMENT EFFECTIVENESS AT SOME PLANTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004696
PUBLICATION DATE: MAR 80

TITLE: RESEARCH AND TECHNOLOGY. PLANT-SCALE COMPARISON OF DIRECT FILTRATION VERSUS CONVENTIONAL TREATMENT OF A LAKE ERIE WATER.

PERSONAL AUTHOR: WESTERHOFF, GARRET P.; AND OTHERS.

DESCRIPTOR: *COST EFFECTIVENESS; CONSTRUCTION; DESIGN; *DRINKING WATER; *ECONOMICS; *FACILITIES; *FILTRATION; *LAKE ERIE; NEW YORK; *OPERATIONS (WATER TREATMENT); TECHNOLOGICAL ADVANCEMENT; TURBIDITY; *WATER TREATMENT; WATER RESOURCES; *WATER SUPPLY.

DESCRIPTIVE NOTE: 148-155P.

ABSTRACT: PRESENTED IS A PLANT-SCALE COMPARASION OF CONVENTIONAL TREATMENT VERSUS DIRECT FILTRATION ACHIEVED BY A SPLIT STREAM OPERATION AT A WATER TREATMENT PLANT IN NEW YORK STATE. INVESTIGATED WERE THE POTENTIAL ECONOMICS RESULTING FROM DECREASED COAGULANT USE; FEWER SLUDGE PRODUCTION, TREATMENT, AND DISPOSAL PROBLEMS; AND REDUCED MANPOWER REQUIREMENTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004697

PUBLICATION DATE: MAR 80

TITLE: STUDIES OF ASBESTOS REMOVAL BY DIRECT FILTRATION OF A LAKE SUPERIOR WATER.

PERSONAL AUTHOR: PETERSON, DAVID L.; AND OTHERS.

DESCRIPTOR: *ASBESTOS; CHEMICAL ANALYSIS; DESIGN; DRINKING WATER; FACILITIES; *FILTRATION; *HAZARDOUS MATERIALS; *LAKE SUPERIOR; MEASUREMENT; OPERATIONS (WATER TREATMENT); *RESEARCH; TECHNOLOGICAL ADVANCEMENT; *WATER TREATMENT; *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 155-161P.

ABSTRACT: DESCRIBED IS A FILTRATION RESEARCH PROGRAM INCLUDING PILOT AND FULL-SCALE PLANT STUDIES, THAT INVESTIGATED THE EFFECTIVENESS OF ANIONIC POLYMERS, THE USE OF PH ADJUSTMENT, THE EFFECTS OF VARIOUS RAPID MIX VELOCITY GRADIENTS ON PARTICULATE REMOVAL, AND ALTERNATE FLUORIDE CHEMICAL FEED POINTS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004698
PUBLICATION DATE: MAR 80

TITLE: EXPERIENCE WITH DIRECT FILTRATION AT ONTARIO'S LAKE HURON TREATMENT PLANT.

PERSONAL AUTHOR: FOLEY, PAUL D.

DESCRIPTOR: *CANADA; CHEMICAL ANALYSIS; DESIGN; DRINKING WATER; *FACILITIES; *FILTRATION; *LAKE HURON; *MEASUREMENT; *OPERATIONS (WATER TREATMENT); PLANNING; TURBIDITY; *WATER TREATMENT; *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 162-164P.

ABSTRACT: DESCRIBED ARE THE TESTING AND MODIFICATION OF A LAKE HURON DIRECT FILTRATION PLANT TO IMPROVE ITS CAPACITY TO MEET MORE STRINGENT TREATMENT OBJECTIVES DESPITE ADVERSE RAW WATER QUALITY CHARACTERISTICS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004699

PUBLICATION DATE: MAR 80

TITLE: RECENT DEVELOPMENTS IN DIRECT FILTRATION.

PERSONAL AUTHOR: TATE, CAROL H.; TRUSSELL, R. RHODES.

DESCRIPTOR: DRINKING WATER; EVALUATION; *FACILITIES; *FILTRATION; *MEASUREMENT; MODELS; *OPERATIONS (WATER TREATMENT); PILOT PLANTS; TURBIDITY; *WATER TREATMENT; *WATER QUALITY; WATER RESOURCES

DESCRIPTIVE NOTE: 165-169P.

ABSTRACT: DISCUSSED ARE RECENT DEVELOPMENTS IN DIRECT FILTRATION AND THEIR APPLICATION. INCLUDED ARE COLOR REMOVAL, OZONATION AS PRETREATMENT, AND SCANNING ELECTRON MICROSCOPY. PILOT PLANT TESTS FROM AUSTRALIA AND PLANT MODEL TESTS FROM LOS ANGELES ARE DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004700

PUBLICATION DATE: MAR 80

TITLE: ALAGE CONCENTRATION AS A QUALITY PARAMETER OF FINISHED DRINKING WATERS IN AND AROUND PITTSBURGH, PA.

PERSONAL AUTHOR: KAY, GEORGE P.; AND OTHERS.

DESCRIPTOR: *ALGAE; *DRINKING WATER; *MEASUREMENT; MICROBIOLOGY; *MUNICIPALITIES; PENNSYLVANIA; *PUBIC HEALTH; *RESEARCH; STATISTICS; *WATER TREATMENT; *WATER QUALITY;

WATER RESOURCES; *WATER SUPPLY
DESCRIPTIVE NOTE: 170-176P.

ABSTRACT: PRESENTED ARE DATA SUMMARIES AND RESULTS OF TWO SAMPLING PROGRAMS ATTEMPTING TO PROVIDE BASELINE DATA FOR GAUGING THE RELATIVE DEGREE OF ALGOLOGICAL CONTAMINATION IN WATER SUPPLY SYSTEMS. FIVE WATER UTILITIES WITHIN ALLEGHENY COUNTY, PENNSYLVANIA, WERE SAMPLED AND ANALYZED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004701

PUBLICATION DATE: MAR 80

TITLE: THE USE OF CHLORAMINES TO PREVENT TRIHALOMETHANE FORMATION.

PERSONAL AUTHOR: NORMAN, THOMAS S.; AND OTHERS

DESCRIPTOR: CHEMICAL ANALYSIS; *CHLORAMINES; *COST EFFECTIVENESS; *DISINFECTION; *DRINKING WATER; *MEASUREMENT; MUNICIPALITIES; *OPERATIONS (WATER TREATMENT); *RESEARCH; *SOUTH DAKOTA; TECHNOLOGICAL ADVANCEMENT; *TRIHALOMETHANES; UTILITIES; *WATER TREATMENT; *WATER QUALITY; WATER RESOURCES.

DESCRIPTIVE NOTE: 176-180P.

ABSTRACT: DESCRIBED IS THE USE OF CHLORAMINES INSTEAD OF FREE CHLORINE RESIDUAL FOR DISINFECTION OF DRINKING WATER. PROCEDURES USED BY A SOUTH DAKOTA DRINKING WATER UTILITY ARE DETAILED. COST ESTIMATES FOR VARIOUS DISINFECTION ALTERNATIVES ARE PRESENTED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V72 N3.

IRIS ACCESSION NUMBER: EW004702

PUBLICATION DATE: FEB 80

TITLE: SLUDGE TREATMENT VS. ENERGY CONSERVATION.

PERSONAL AUTHOR: GROVER, KATHRYN.

DESCRIPTOR: ECONOMICS; *ENERGY; ENERGY CONSERVATION; FACILITIES; *HEAT TREATMENT; OPERATIONS (WASTEWATER); *SLUDGE; SLUDGE TREATMENT; *TECHNOLOGY; *WASTE DISPOSAL; WASTES; *WASTEWATER TREATMENT; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 39-42P.

ABSTRACT: DISCUSSED ARE THE ENERGY, HANDLING, OPERATIONAL AND TREATMENT PROBLEMS ASSOCIATED WITH THE HEAT TREATMENT OF SEWAGE SLUDGE. THE ZIMMERMAN PROCESS, A WET AIR OXIDATION PROCESS UTILIZED BY VERNON, CONNECTICUT, IS DESCRIBED.

AVAILABILITY: AMERICAN CITY AND COUNTY; V95 N2.

IRIS ACCESSION NUMBER: EW004703

PUBLICATION DATE: FEB 80

TITLE: OLD WATER SYSTEM GETS NEW LIFE.

PERSONAL AUTHOR: BILODEAU, EUGENE.

DESCRIPTOR: *DESIGN; *DRINKING WATER; *FACILITIES; *FILTRATION; *LEAD; MANAGEMENT; MUNICIPALITIES; OPERATIONS (WATER); PLANNING; PUBLIC HEALTH; *VERMONT (BENNINGTON); *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 67-69P.

ABSTRACT: DESCRIBED ARE THE DESIGN AND OPERATION OF THE BENNINGTON, VERMONT WATER TREATMENT FACILITY, A MODULAR PREFABRICATED FILTRATION UNIT WHOSE CORROSION CONTROL PROGRAM IS THE ONLY ONE IN THE COUNTRY THAT HAS SUCCEEDED IN BRINGING THE LEVEL OF LEAD IN DRINKING WATER BACK TO SAFE LEVELS.

AVAILABILITY: AMERICAN CITY AND COUNTY; V95 N2.

IRIS ACCESSION NUMBER: EW004723

PUBLICATION DATE: FEB 80

TITLE: FOUR-DAY WORK WEEK IMPROVES SERVICE TO THE PUBLIC.

PERSONAL AUTHOR: ANDERSON, DAVID.

DESCRIPTOR: *EMPLOYEES; *EVALUATION; MANAGEMENT; *MUNICIPALITIES; *OPERATIONS (WASTEWATER); PARAPROFESSIONAL PERSONNEL; *PERSONNEL; *SCHEDULING; *UTILITIES; WASTEWATER TREATMENT; *WORKING HOURS

DESCRIPTIVE NOTE: 98-100P.

ABSTRACT: PRESENTED IS AN ASSESSMENT OF THE 4-10-40 HOUR, 6-DAY OPERATION NOW UTILIZED BY THE GLADSTONE, MISSOURI, WASTEWATER OPERATIONS CREWS AS COMPARED TO THE 5-8-40 HOUR, 5-DAY OPERATION WORK SCHEDULE PREVIOUSLY IN EFFECT. FACTORS ASSESSED INCLUDE COSTS, SERVICE TO THE PUBLIC, OVERTIME, ABSENTEEISM AND STAFF MORALE.

AVAILABILITY: PUBLIC WORKS; VIII N2.

IRIS ACCESSION NUMBER: EW004724

PUBLICATION DATE: FEB 80

TITLE: CONTROLLING AMMONIA IN WASTEWATER EFFLUENTS.

PERSONAL AUTHOR: STOLTENBERG, DAVID H.

DESCRIPTOR: *ACTIVATED SLUDGE; *AMMONIA; *CHEMICAL ANALYSIS; CHEMISTRY; *EFFLUENTS; FACILITIES; MANAGEMENT; *MEASUREMENT; MICROBIOLOGY; NITROGEN; *NITRIFICATION; *OPERATIONS (WASTEWATER); *PROCESS CONTROL; *SLUDGE; *WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 72-73P.

ABSTRACT: DISCUSSED IS THE CHEMISTRY OF THE NITRIFICATION OF WASTEWATER WITH RESPECT TO THE ABILITY OF ACTIVATED SLUDGE PROCESSES TO ACHIEVE IT. THE EFFECTS OF TEMPERATURE, DISSOLVED OXYGEN IN THE MIXED LIQUOR OF AERATION TANKS, PH, AMNIONIC NITROGEN CONCENTRATION, AND THE PRESENCE OF TOXIC METALS AND ORGANICS ARE PRESENTED.

AVAILABILITY: PUBLIC WORKS; VIII N2.

IRIS ACCESSION NUMBER: EW004725

PUBLICATION DATE: FEB 80

TITLE: GAC WATER TREATMENT SYSTEMS.

PERSONAL AUTHOR: CULP, RUSSELL L.

DESCRIPTOR: *COSTS; *DESIGN; ENGINEERING; EVALUATION; FACILITIES; *GRANULAR ACTIVATED CARBON; INFORMATION SOURCES; MUNCIPALITIES; *OPERATIONS (WATER TREATMENT); PILOT PLANTS; *SYSTEMS ANALYSIS; UTILITIES; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 83-87P.

ABSTRACT: PRESENTED IS A COMPARISON OF GRANULAR ACTIVATED CARBON (GAC) TREATMENT AS APPLIED TO PUBLIC WATER SUPPLIES AND AS USED IN WASTEWATER AND FOOD PROCESSING. PILOT PLANT TESTING, CASTS, DESIGN, AND COST AND DESIGN DATA SOURCES ARE EMPHASIZED.

AVAILABILITY: PUBLIC WORKS; VIII N2.

IRIS ACCESSION NUMBER: EW004726

PUBLICATION DATE: FEB 80

TITLE: CODISPOSAL OF MUNICIPAL SOLID WASTE AND SLUDGE.

DESCRIPTOR: *COST EFFECTIVENESS; DESIGN; ECONOMICS; INCINERATION; MANAGEMENT; *MUNICIPALITIES; OPERATIONS (SOLID WASTE); *SLUDGE; *SOLID WASTES; *TECHNOLOGY; *THERMAL DESTRUCTION; UTILITIES; *WASTE DISPOSAL; *WASTES (SOLID)

DESCRIPTIVE NOTE: 88-89,93P.

ABSTRACT: DISCUSSED ARE FOUR METHODS OF THERMAL DISTRUCTION IN THE CODISPOSAL OF MUNICIPAL SOLID WASTE AND SLUDGE: REFUSE DERIVED FUEL (RDF) USE IN MULTIPLE HEARTH OR FLUIDIZED-BED SLUDGE INCINERATORS, SLUDGE IN MSW DEDICATED BOILERS; AND SLUDGE IN MSW STARVED AIR COMBUSTERS.

AVAILABILITY: PUBLIC WORKS; VIII N2.

IRIS ACCESSION NUMBER: EW004727

PUBLICATION DATE: MAR 80

TITLE: BACTERIAL SUPPLEMENTATION AIDS WASTEWATER TREATMENT.

PERSONAL AUTHOR: GARDNER, CLARENCE.

DESCRIPTOR: *BIOAUGMENTATION; *COLORADO (ARVADA); *FACILITIES; INDUSTRY; *MANAGEMENT; *MICROBIOLOGY; MUNICIPALITIES; *OPERATIONS (WASTEWATER); *PROBLEMS; TECHNOLOGY; WASTES; *WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 71-72P.

ABSTRACT: PROBLEMS SUCH AS GREASE ACCUMULATIONS IN THE PRIMARY DIGESTER PERSISTENT ODORS, AND PERIODIC PLANT UPSETS CAUSED BY INDUSTRIAL WASTE DISCHARGES DISAPPEARED AFTER A PROGRAM OF BIOAUGMENTATION WAS INITIATED AT THE ARVADA, COLORADO, WASTEWATER TREATMENT PLANT.

AVAILABILITY: PUBLIC WORKS; VIII N3.

IRIS ACCESSION NUMBER: EW004728

PUBLICATION DATE: MAR 80

TITLE: GAS-LIQUID DISSOLUTION IN WASTEWATER TREATMENT.

PERSONAL AUTHOR: VIVONA, MORRIS A.

DESCRIPTOR: *AERATION; DESIGN; *ENGINEERING; FACILITIES; MANAGEMENT; *MEASUREMENT; *OPERATIONS (WASTEWATER TREATMENT); PHASE EQUILIBRIUM; TECHNOLOGY; *WASTEWATER TREATMENT; *GAS-LIQUID DISSOLUTION.

DESCRIPTIVE NOTE: 73-76P.

ABSTRACT: DISCUSSED ARE THE PRINCIPLES OF GAS-LIQUID DISSOLUTION RELATIONSHIPS AND THEIR APPLICATION IN THE AERATION PROCESS, PARTICULARLY AIR INJECTION IN THE BIOLOGICAL TREATMENT OF WASTEWATER.

AVAILABILITY: PUBLIC WORKS; VIII N3.

IRIS ACCESSION NUMBER: EW004729

PUBLICATION DATE: MAR 80

TITLE: DEFLECTION MECHANISM OF PVC SEWER PIPE.

PERSONAL AUTHOR: NESBEITT, WILLIAM D.; WALKER, ROBERT T.

DESCRIPTOR: DEFLECTION MECHANISMS; *ENGINEERING; *EVALUATION; *PVC PIPE; *PIPE (POLYVINYL CHLORIDE); PLASTICS; *SEWERS; *SOIL MECHANICS; SOILS; *STATE-OF-THE-ART

REVIEWS; TESTING; *SEWER PIPE.

DESCRIPTIVE NOTE: 79-83P.

ABSTRACT: PRESENTED IS A STATE-OF-THE-ART REVIEW OF THE RELATIONSHIP BETWEEN SOIL LOADS AND DEFLECTION OF FLEXIBLE CONDUITS, ESPECIALLY PVC SEWER PIPE.

AVAILABILITY: PUBLIC WORKS; VIII N3.

IRIS ACCESSION NUMBER: EW004730

PUBLICATION DATE: 79

TITLE: MECHANICAL MAINTENANCE TRAINING MODULE #8-VALVES.

DESCRIPTOR: *AUDIOVISUAL AIDS; *EQUIPMENT; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *MAINTENANCE; *PARAPROFESSIONAL PERSONNEL; *TRAINING PROGRAMS; *VALVES; VIDEOTAPE CASSETTES; VOCATIONAL EDUCATION; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: VIDEOCASSETTES-MODULE 8.

ABSTRACT: DETAILED IN THESE FOUR VIDEOCASSETTES, ONE OF FIVE MODULES OF A MAINTENANCE TRAINING PROGRAM FOR WATER AND WASTEWATER TREATMENT PERSONNEL, ARE THE DISASSEMBLY, INSPECTION, MAINTENANCE, AND REINSTALLATION OF GATE, GLOBE, CONTROL DIAPHRAGM AND BUTTERFLY VALVES. THIS MODULE CONSISTS OF 3/4 INCH U-MATIC COLOR VIDEOCASSETTES, A STUDENT WORKBOOK, TRANSPARENCIES AND AN INSTRUCTORS GUIDE.
AVAILABILITY: NTOTC, EPA, ATTENTION: EILEEN HOPEWELL, CINCINNATI OH 45268. (513)-684-7503.

INSTITUTION NAME: INDUSTRIAL TRAINING CORPORATION.

IRIS ACCESSION NUMBER: EW004736

PUBLICATION DATE: 77

TITLE: POLLUTION EVALUATION, THE QUANTITATIVE ASPECTS.

PERSONAL AUTHOR: PICKERING, WILLIAM F.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CHEMICAL ANALYSIS; EVALUATION METHODS; *LABORATORY TECHNIQUES; *QUANTITATIVE METHODS; *SAMPLING; *STATISTICAL ANALYSIS; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 199P.

ABSTRACT: THIS BOOK ADDRESSES TWO RELATED TOPICS. ODD NUMBERED CHAPTERS DISCUSS MODES OF EVALUATING TYPICAL FORMS OF ENVIRONMENTAL POLLUTION AND INCLUDE DISCUSSIONS OF NATURAL FACTORS REQUIRING CONSIDERATION. EVEN NUMBERED CHAPTERS TAKE UP FUNDAMENTAL PRINCIPLES OF SOME OF THE EVALUATION TECHNIQUES QUOTED IN THE RELATED CHAPTER ON POLLUTION EVALUATION. FOR THE SAKE OF BREVITY THESE CHAPTERS DEALING WITH THE TECHNIQUES OF ANALYSIS ARE NECESSARILY GENERAL DISCUSSIONS RATHER THAN DETAILED INSTRUCTIONS ON SPECIFIC STEPS INVOLVED IN SUBJECT ANALYSES.

AVAILABILITY: CENTER FOR PROFESSIONAL ADVANCEMENT, PO BOX 994, EAST BRUNSWICK, NJ 08816. PRICE: $18.25.

IRIS ACCESSION NUMBER: EW004739

PUBLICATION DATE: JAN 78

TITLE: CITIES AND 208.

PERSONAL AUTHOR: BEALS, ALAN; AND OTHERS.

DESCRIPTOR: CASE STUDIES; *CITIZEN PARTICIPATION; CITY PROBLEMS; *LAND USE; NATURAL RESOURCES; *NONPOINT SOURCE POLLUTION; *POLLUTION; PUBLIC POLICY; *REGIONAL PLANNING; SURVEYS; *WATER POLLUTION CONTROL; WATER RESOURCES.

DESCRIPTIVE NOTE: 84P.

ABSTRACT: THIS DOCUMENT DETAILS ANALYTICAL FINDINGS RESULTING FROM AN INVESTIGATION OF LOCAL GOVERNMENT EXPERIENCES IN AREAWIDE WASTE TREATMENT PROGRAMS IN FOUR METROPOLITAN REGIONS. THE REPORT IS ORGANIZED INTO THREE SECTIONS: (1) A SUMMARY OF FINDINGS; (2) CASE STUDIES OF FOUR 208 PROGRAMS; AND (3) RESULTS OF A SURVEY OF LOCAL OFFICIALS CONCERNING 208 PROGRAM EXPERIENCES.

AVAILABILITY: NATIONAL LEAGUE OF CITIES, PUBLICATIONS, 1620 EYE STREET, NW., WASHINGTON, D.C. 20006. PRICE: $7.00.

IRIS ACCESSION NUMBER: EW004744

PUBLICATION DATE: JAN 80

TITLE: EXTENDED SET OF COMPONENTS IN PIPE NETWORKS.

PERSONAL AUTHOR: CHANDRASHEKAR, M.

DESCRIPTOR: *DESIGN; ECONOMIC ANALYSIS; *ENGINEERING; MATRIX METHODS; *MODELS; *PIPE FLOW; *PIPES; PUMPS; *VALVES; *WATER DISTRIBUTION; *WATER SUPPLY.

DESCRIPTIVE NOTE: 133-149P.

ABSTRACT: BASED ON GRAPH THEORETIC CONCEPTS, MODELS FOR AN EXTENDED SET OF COMPONENTS ENCOUNTERED IN WATER DISTRIBUTION SYSTEMS, SUCH AS: PRESSURE-REDUCING VALVES, CHECK VALVES, AND BOOSTER PUMPS, ARE DEVELOPED. THE PROCEDURE LEADS TO EFFICIENT AND ECONOMIC ANALYSIS OF WATER-DISTRIBUTION SYSTEMS ON A DIGITAL COMPUTER.

AVAILABILITY: JOURNAL OF THE HYDRAULICS DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004745

PUBLICATION DATE: FEB 80

TITLE: STAGED MULTIPORT DIFFUSERS.

PERSONAL AUTHOR: ALMQUIST, CHARLES; STOLZENBACH, KEITH D.

DESCRIPTOR: *COASTAL WATERS; DESIGN; *DIFFUSERS; DILUTION; *EFFLUENTS; *ENGINEERING; *EQUIPMENT; *MODELS; OCEANOGRAPHY; *THERMAL POLLUTION; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 285-302P.

ABSTRACT: PRESENTED ARE THE RESULTS OF A THEORETICAL AND EXPERIMENTAL INVESTIGATION OF STAGED DIFFUSERS IN A QUIESCENT, UNSTRATIFIED WATER BODY. THE THEORY IS APPLICABLE TO THE DESIGN OF STAGED DIFFUSERS IN COASTAL RECEIVING WATERS.

AVAILABILITY: JOURNAL OF THE HYDRAULICS DIVISION; V106 N2.

IRIS ACCESSION NUMBER: EW004747

PUBLICATION DATE: MAR 80

TITLE: TRASH & COAL & SEWAGE=ENERGY.

PERSONAL AUTHOR: LESNETT, W. R.

DESCRIPTOR: ELECTRICITY; *ENERGY; FACILITIES; *FLORIDA (LAKELAND); FUELS; *MUNICIPALITIES; OPERATIONS (WASTEWATER); *POWER GENERATION; *RECYCLING (WASTEWATER); SOLID WASTES; *UTILITIES (ELECTRIC); *WASTE DISPOSAL.

DESCRIPTIVE NOTE: 26-27P.

ABSTRACT: DESCRIBED IS A 364 MEGAWATT POWER GENERATING UNIT BEING CONSTRUCTED IN LAKELAND FLORIDA THAT WILL BE FUELED WITH A COMBINATION OF HIGH-SULFUR KENTUCKY COAL AND SOLID WASTE. IT WILL USE SEWAGE WATER EFFLUENT FROM THE MUNICIPAL SEWAGE TREATMENT PLANT FOR COOLING PURPOSES.

AVAILABILITY: EPA JOURNAL; V6 N3.

IRIS ACCESSION NUMBER: EW004748

PUBLICATION DATE: MAR 80

TITLE: EVALUATION OF O&M FACTORS LIMITING WASTEWATER PLANT PERFORMANCE.

PERSONAL AUTHOR: HEGG, B. A.; AND OTHERS.

DESCRIPTOR: DESIGN; *EVALUATION; *FACILITIES; *MANAGEMENT; MEASUREMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE; PERSONNEL; *RESEARCH REPORTS; SURVEYS; *WASTEWATER TREATMENT; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 39-45P.

ABSTRACT: PRESENTED ARE THE RESULTS OF A 3 1/2 YEAR RESEARCH PROGRAM INITIATED BY THE EPA'S OFFICE OF RESEARCH AND DEVELOPMENT AND CONDUCTED BY M & I, INC. CONSULTING ENGINEERS TO IDENTIFY, QUANTIFY, AND RANK THE FACTORS CAUSING POOR WASTEWATER TREATMENT PLANT PERFORMANCE.

AVAILABILITY: POLLUTION ENGINEERING; V12 N3.

IRIS ACCESSION NUMBER: EW004749

PUBLICATION DATE: MAR 80

TITLE: CHEMICAL SPILLS: RESPONSIBILITY AND RESPONSE.

PERSONAL AUTHOR: IULIUCCI, ROBERT.

DESCRIPTOR: *ACCIDENTS; CHEMICAL INDUSTRY; *CHEMICAL SPILLS; EMERGENCY PROGRAMS; *EMERGENCY SERVICES; EQUIPMENT; *INFORMATION SOURCES; *PLANNING; *SAFETY; *TRANSPORTATION.

DESCRIPTIVE NOTE: 56-58P.

ABSTRACT: DESCRIBED ARE PROCEDURES UTILIZED BY THE CHEMICAL TRANPORTATION EMERGENCY CENTER (CHEMTREC) TO PROVIDE ASSISTANCE TO CARRIERS AND PUBLIC EMERGENCY PERSONNEL WHO ARE AT THE SCENE OF A CHEMICAL TRANSPORTATION ACCIDENT ON RECEIPT OF A PHONE CALL FROM THE SCENE INDENTIFYING THE PRODUCT INVOLVED.

AVAILABILITY: POLLUTION ENGINEERING; V12 N3.

IRIS ACCESSION NUMBER: EW004750

PUBLICATION DATE: MAR 80

TITLE: THE A-B-Y'S OF WASTEWATER TREATMENT.

PERSONAL AUTHOR: GRUTSCH, JAMES F.

DESCRIPTOR: *ACTIVATED SLUDGE; *BIOMASS; CHEMICAL ANALYSIS; DESIGN; *ENVIRONMENTAL RESEARCH; MEASUREMENT; MICROBIOLOGY; *OPERATIONS (WASTEWATER); *ORGANICS; *WASTEWATER TREATMENT; WASTES.

DESCRIPTIVE NOTE: 276-281P.

ABSTRACT: DESCRIBED ARE TWO APPROACHES TO IMPROVE THE PERFORMANCE OF THE ACTIVATED SLUDGE PROCESS (ASP) FOR REMOVING ORGANICS FROM WASTEWATER. THEY ARE (1) OPERATION AT HIGH SLUDGE AGE AND (2) FURTHER ENHANCEMENT BY USING HIGH CONCENTRATIONS OF POWDERED/ACTIVATED CARBON (PAC) WITH THE ACTIVATED SLUDGE.

AVAILABILITY: ENVIRONMENTAL SCIENCE AND TECHNOLOGY; V14 N3.

IRIS ACCESSION NUMBER: EW004760

PUBLICATION DATE: MAR 80

TITLE: WATER RESOURCES PLANNING USING COMPUTER GRAPHICS.

PERSONAL AUTHOR: FRENCH, PETER N.; AND OTHERS.

DESCRIPTOR: *COMPUTER GRAPHICS; COMPUTERS; ECONOMICS; *MODELS; *PLANNING; *RESERVOIRS; *RIVERS; *SIMULATION; WATER SUPPLY; WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 21-42P.

ABSTRACT: PRESENTED ARE COMPUTER-AIDED SIMULATION DESIGN METHODS FOR WATERS RESOURCE PLANNING USING INTERACTIVE COMPUTER GRAPHICS. PROBLEMS OF WATER QUALITY PREDICTION, RESERVOIR SIMULATION, MULTIOBJECTIVE RESERVOIR-WATER SUPPLY PLANNING AND FLOOD MANAGEMENT ARE ADDRESSED. ADVANTAGES OF THIS APPROACH INCLUDE LOW COST, CONVENIENCE, FLEXIBILITY, REDUCED ERRORS, IMPROVED COMMUNICATION AND RESPONSE TIME.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004761

PUBLICATION DATE: MAR 80

TITLE: POLICY ISSUES CONCERNING WATER QUALITY/QUANTITY.

PERSONAL AUTHOR: WHIPPLE, WILLIAM F.

DESCRIPTOR: *COST EFFECTIVENESS; *DECISION MAKING; FEDERAL GOVERNMENT; *GOVERNMENT ROLE; LAND USE; *MANAGEMENT; *POLICIES; *PLANNING; RECYCLING; STATE GOVERNMENT; *URBAN ENVIRONMENT; UTILITIES; WATER POLLUTION CONTROL; *WATER RESOURCES; WASTE DISPOSAL; *WATER QUALITY.

DESCRIPTIVE NOTE: 71-79P.

ABSTRACT: THE PRESIDENT'S WATER POLICY INITIATES DID NOT CO-ORDINATE NATIONAL WATER QUALITY AND QUANTITY PROGRAMS TO INCREASE COST-EFFECTIVENESS AND EFFICIENCY. THE PAPER CONSIDERS WATER QUALITY/QUANTITY INTERFACES, THE RELATIONSHIP OF PLANNING TO DECISION-MAKING, ALTERANTIVE PLANNING CRITERIA, AND ALTERNATIVE ARRANGEMENTS FOR PLANNING AT FEDERAL, STATE AND LOCAL LEVELS.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004762

PUBLICATION DATE: MAR 80

TITLE: FAIRNESS CONSIDERATIONS AND ALTERNATIVE POLICIES.

PERSONAL AUTHOR: PEIRCE, J. JEFFREY; AND OTHERS.

DESCRIPTOR: *DECISION MAKING; *MANAGEMENT; *PLANNING; VALUES; *WATER POLLUTION CONTROL; *WATER REOSURCES.

DESCRIPTIVE NOTE: 81-87P.

ABSTRACT: AN APPROACH FOR AVOIDING THE USUAL INCREMENTAL POLICY FORMATION FOR WATER RESOURCES MANAGEMENT IS PRESENTED. THE METHODOLOGY CONCENTRATES ON DEFINING MANAGEMENT OPTIONS TO MEET CONCISE FAIRNESS DEFINTIONS. THIS APPROACH TO PLANNING DOES GENERATE A VARIETY OF OPTIONS WHICH MAY THEN BE EVALUATED.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004763

PUBLICATION DATE: MAR 80

TITLE: SEPTIC SYSTEM PROBLEMS ON AN URBAN FRINGE.

PERSONAL AUTHOR: GOEHRING, DARRYL R.; CARR, F. ROBERT.

DESCRIPTOR: *COST EFFECTIVENESS; *ENVIRONMENT; *GROUNDWATER; *LAND USE; MANAGEMENT; POLLUTION; *SEPTIC TANKS; TAXES; *URBAN EXTENSION; *URBAN AREAS; URBAN ENVIRONMENT; WATER POLLUTION CONTROL; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 89-102P.

ABSTRACT: ANALYZED ARE SEPTIC SYSTEMS AS A GROWTH MANAGEMENT ISSUE AND THEIR IMPACT ON LAND USE PLANS, FISCAL BASES, THE ENVIRONMENT AND THE GENERAL PUBLIC. CONSIDERED ARE THE WAY IN WHICH CONVENTIONAL LAND USE AND PUBLIC POLICY DECISIONS INCREASE THE HIGH COSTS OF WASTE TREATMENT.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004764

PUBLICATION DATE: MAR 80

TITLE: PRACTICIAL ASPECTS OF TOWN WATER PLANNING.

PERSONAL AUTHOR: FISCHER, PAUL G.; CHIANG, TSUNG TING.

DESCRIPTOR: AQUEDUCTS; *COMPUTERS; COST-EFFECTIVENESS; DATA PROCESSING; *ECONOMICS; *MANAGEMENT; *PROBABILITY THEORY; *PLANNING; RAINFALL; RESERVOIRS; SURFACE RUNOFF; *WATER SUPPLY; *WATER RESOURCES; WATER USE.

DESCRIPTIVE NOTE: 159-172P.

ABSTRACT: THIS CASE STUDY UTILIZES A SYSTEMS PLANNING APPROACH TO TOWN WATER-SUPPLY PLANNING. INVOLVED ARE COMPUTER SIMULATION MODELING TECHNIQUES BASED ON PROBABILITY DATA TO OPTIMIZE THE AVAILABLE ECONOMIC SAFE YIELD. THE APPROACH RESULTS IN SUBSTANTIAL FINANCIAL SAVINGS AND INCREASED IMPOUNDMENT STORAGE.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004765

PUBLICATION DATE: MAR 80

TITLE: WATER RESOURCES FOR CHICAGO--HISTORY AND FUTURE.

PERSONAL AUTHOR: NEIL, FORREST C.; DALTON, FRANK E.

DESCRIPTOR: *CITY PLANNING; *CITY PROBLEMS; *CHICAGO; *MANAGEMENT; POLLUTION; *PLANNING; *SEWERS; UTILITIES; *URBAN AREAS; URBAN ENVIRONMENT; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WASTE DISPOSAL; *WATER QUALITY; *WATER TUNNELS.

DESCRIPTIVE NOTE: 173-184P.

ABSTRACT: COMBINED SEWER SYSTEMS IN MUCH OF THE CHICAGO AREA NEGATE MANY OF THE BENEFITS OF THE LARGEST AND MOST ADVANCED SYSTEM OF WATER RECLAIMATION IN THE WORLD. DISCUSSED ARE THE PROPOSED TUNNEL AND RESERVOIR PLAN AND THE COMPLICATIONS FOR LOCAL DOMESTIC AND INDUSTRIAL WATER SUPPLY.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004766

PUBLICATION DATE: MAR 80

TITLE: OPTIMAL CONTROL OF UNSTEADY COMBINED SEWER FLOW.

PERSONAL AUTHOR: LABADIE, JOHN W.; AND OTHERS.

DESCRIPTOR: *AUTOMATION; *CITY PLANNING; *CITY PROBLEMS; *FLOW CONTROL; HYDRAULICS; *MODELS; *REGULATORS; *SEWERS; SURFACE RUNOFF; VALVES; *WATER POLLUTION CONTROL; WATER RESOURCES; WASTE DISPOSAL

DESCRIPTIVE NOTE: 205-223P.

ABSTRACT: PRESENTED IS A DYNAMIC PROGRAMMING ALGORITHM WHICH UTILIZES ORTHOGONAL POLYNOMIALS TO SUBDIVIDE MULTIDIMENSIONAL PROBLEMS INTO A SERIES OF UNDIMENSIONAL PROBLEMS. THIS CAN BE TO CONTROL LOGIC FOR ADJUSTABLE VALVES, GATES AND REGULATORS THAT INCLUDE CONSIDERATION OF UNSTEADY SEWER FLOWS AND BACKWATER EFFECTS.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004767

PUBLICATION DATE: MAR 80

TITLE: POLITICAL ASPECTS OF URBAN STORMWATER MANAGEMENT.

PERSONAL AUTHOR: BROWN, LEVI A.

DESCRIPTOR: *CITIZEN PARTICIPATION; *CITY PROBLEMS; CITY PLANNING; DRAINAGE; FLOODS; *GEORGIA; LEGISLATION; MANAGMENT; MUNICIPALITIES; *POLITICAL ISSUES; *SURVEYS; *SURFACE RUNOFF; URBAN EXTENSION; *URBAN AREAS; *WATER RESOURCES; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 265-273P.

ABSTRACT: THIS PAPER EXAMINES THE EXPERIENCES OF DEKALB COUNTY, GA., IN IMPLEMENTING STORMWATER MANAGEMENT AND HANDLING DRAINAGE AND FLOODING PROBLEMS DURING ITS PERIOD 1973-1979. LOCAL POLITICS WERE CAREFULLY CONSIDERED THROUGH CITIZEN OPINION SURVEYS AND PUBLIC PARTICIPATION.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004768

PUBLICATION DATE: MAR 80

TITLE: STOCHASTIC APPROACH TO WASTE TREATMENT PLANNING.

PERSONAL AUTHOR: HANSEN, ROGER D.; AND OTHERS.

DESCRIPTOR: COMPUTER PROGRAMMING; *DESIGN; *ECONOMIC RESEARCH; *ENGINEERING; *FACILITIES; FORECASTING; *MODELS; MANAGEMENT; *PREDICTION; *REGIONAL PLANNING; RECYCLING; *SYSTEMS APPROACH; *SEWAGE SYSTEMS; STOCHASTIC MODELS; *WASTEWATER TREATMENT; WASTE DISPOSAL; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 275-287P.

ABSTRACT: THE ARTICLE DESCRIBES A METHODOLOGY FOR SIZING AND STAGING A WASTEWATER TREATMENT PLANT THAT IS BASED ON PROBABILITY PLANNING. PROCEDURES USE A TRANSITION MATRIX INVOLVING SUBJECTIVE PROBABILITY ESTIMATES AND A STOCHASTIC MIXED-INTEGER PROGRAMMING MODEL.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004769

PUBLICATION DATE: MAR 80

TITLE: ENERGY IMPACT ANALYSIS IN WATER PROJECT PLANNING.

PERSONAL AUTHOR: HAGAN, ROBERT M.; ROBERTS, EDWIN B.

DESCRIPTOR: *CONSTRUCTION; *DAMS; *DESIGN; ENERGY

CONSERVATION; *ENVIRONMENTAL IMPACT STATEMENTS; ELECTRICITY; FUEL CONSUMPTION; *POWER PLANTS; *PROJECT PLANNING; WATER QUALITY; *WASTEWATER TREATMENT; WASTE DISPOSAL; WATER POLLUTION CONTROL; WATER SUPPLY.

DESCRIPTIVE NOTE: 289-302P.

ABSTRACT: DISCUSSED ARE WHY ENERGY ANALYSIS OF WATER DEVELOPMENT AND USE PROJECTS SHOULD BE AN INTEGRAL PART OF THE PLANNING PROCESS. ILLUSTRATES MANY OF THE PROBLEMS ASSOCIATED WITH ENERGY ANALYSES AND HOW THE CONCLUSION DEPENDS ON THE ADEQUACY OF THE INPUT. PRESENTS EXAMPLES OF WATER PROJECT PLANNING.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004770

PUBLICATION DATE: MAR 80

TITLE: ICPRB AND WASHINGTON METRO WATER MANAGEMENT.

PERSONAL AUTHOR: SHEER, DANIEL P.; EASTMAN, PAUL W.

DESCRIPTOR: *COMPUTER SIMULATION; *DECISION MAKING; *MANAGEMENT; *PLANNING; RECYCLING; *SIMULATION; SEWERS; UTILITIES; *WASTE DISPOSAL; *WATER RESOURCES; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER SUPPLY; RESEVOIR OPERATION; SEWERS; WASHINGTON D.C.

DESCRIPTIVE NOTE: 303-317P.

ABSTRACT: REVIEWS BACKGROUND AND CURRENT STATUS OF THE FRAGMENTATION OF WATER RESOURCES MANAGEMENT POLICIES IN THE WASHINGTON D.C. AREA. STRESSES THE POSITIVE ROLE IN INTEGRATION THAT THE INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN (ICPRB) CAN PLAY. DETAILS SEVERAL EXAMPLES OF TECHNICAL ASSISTANCE AND CO-ORDINATION PROVIDED BY THE ICPRB.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004771

PUBLICATION DATE: MAR 80

TITLE: UN WATER CONFERENCE: SCOPE FOR TRANSFER OF KNOWLECE IN ITS ACTION PLAN.

PERSONAL AUTHOR: NEGHASSI, HABTE MARIAM.

DESCRIPTOR: AGRICULTURE; *CONFERENCES; *DEVELOPING NATIONS; EDUCATION; ENGINEERING; ENVIRONMENT; *GLOBAL APPROACH; *MANAGEMENT; NATURAL RESOURCES; *PLANNING; *RESEARCH; *TRAINING; UTILITIES; WASTE DISPOSAL; *WATER RESOURCES; WATER POLLUTION CONTROL; WATER SUPPLY.

DESCRIPTIVE NOTE: 351-363P.

ABSTRACT: DESCRIBES THE WATER RESOURCE DEVELOPMENT AND MANGEMENT PLAN RECOMMENDATIONS ADOPTED BY THE UNITED NATIONS WATER CONFERENCE IN MARCH 1977. DISCUSSES THE SCOPE, PROBLEMS AND CHALLENGES POSED BY THE TRANSFER OF WATER MANAGEMENT EXPERTISE.

AVAILABILITY: JOURNAL OF THE WATER RESOURCES PLANNING AND MANAGEMENT DIVISION; V106 N1.

IRIS ACCESSION NUMBER: EW004779

PUBLICATION DATE: 77

TITLE: GROUND WATER, CALIFORNIA'S SUNKEN TREASURE.

DESCRIPTOR: *AUDIOVISUAL AIDS; CONSERVATION (ENVIRONMENT); *FILMS; *GROUNDWATER; HYDROLOGY; *INSTRUCTIONAL MATERIALS; MANAGEMENT; NATURAL RESOURCES; NONPRINT MEDIA; *POST SECONDARY EDUCATION; WATER QUALITY; *WATER RESOURCES.

DESCRIPTIVE NOTE: 14 MINUTE, 16MM FILM

ABSTRACT: PRESENTED ARE THE SOURCES OF GROUNDWATER, SUCH AS SPRINGS AND WELLS IN CALIFORNIA AND THE CONSERVATION OF WATER FROM ALL SOURCES. TOPICS INCLUDE GROUNDWATER REPLACEMENT, GEOLOGY, WELLS, DRILLING METHODS, ARTIFICIAL RECHARGE BASINS, PUMPS AND WATER RIGHTS.

AVAILABILITY: GRAPHIC SERVICES BRANCH, STATE DEPARTMENT OF WATER RESOURCES, P O BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004780

PUBLICATION DATE: 78

TITLE: CITY WATER.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONSERVATION (ENVIRONMENT); *CALIFORNIA; *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; SCIENCE EDUCATION; *URBAN ENVIRONMENT; *WATER RESOURCES.

DESCRIPTIVE NOTE: 16MM, COLOR SOUND 7 MINUTE FILM.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN IN CALIFORNIA DESCRIBE THE USES AND SOURCES OF WATER IN THE CITY. TOPICS INCLUDE HOW PEOPLE WASTE WATER, WHAT HAPPENS TO WATER AFTER IT IS USED, AND WATER CONSERVATION.

AVAILABILITY: CALIFORNIA DEPARTMENT OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004781

PUBLICATION DATE: 78

TITLE: SAVE WATER.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONSERVATION (ENVIRONMENT); *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; SCIENCE EDUCATION; URBAN ENVIRONMENT; *WATER RESOURCES; *CALIFORNIA.

DESCRIPTIVE NOTE: 16MM SOUND, COLOR 6 MINUTE FILM.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN IN CALIFORNIA DESCRIBE HOW PEOPLE IN CALIFORNIA WASTE WATER. PROCEDURES THAT CAN BE UTILIZED BY INDIVIDUALS, FAMILIES, AND CITIES TO CONSERVE WATER ARE DETAILED.

AVAILABILITY: CALIFORNIA DEPARTMENT OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004782

PUBLICATION DATE: 78

TITLE: WATER FOR INDUSTRY.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONSERVATION (ENVIRONMENT); *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *INDUSTRY; *INSTRUCTIONAL MATERIALS; *NATURAL RFSOURCES; SCIENCE EDUCATION; *WATER RESOURCES; *CALIFORNIA.

DESCRIPTIVE NOTE: 16MM, COLOR, SOUND 5 MINUTES.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN IN CALIFORNIA DESCRIBE THE USES OF WATER BY INDUSTRY. EMPHASIZED ARE THE PROCESSING AND MANAFACTURING OF PRODUCTS. WATER CONSERVATION AND WATER REUSE METHODS UTILIZED BY INDUSTRY ARE DETAILED.

AVAILABILITY: CALIFORNIA DEPARTMENT OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004783

PUBLICATION DATE: 78

TITLE: CLEAN WATER.

DESCRIPTOR: *AUDIOVISUAL AIDS; *DRINKING WATER; *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *INSTRUCTIONAL MATERIALS; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY; *WATER RESOURCES; *CALIFORNIA.

DESCRIPTIVE NOTE: 16MM, COLOR, SOUND 5 1/2 MINUTES.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN IN CALIFORNIA DESCRIBE DRINKING WATER PURIFICATION AND WASTEWATER TREATMENT. TOPICS INCLUDE PROCEDURES FOLLOWED IN THE TREATMENT OF DRINKING WATER AND WASTEWATER, WATER QUALITY AND ITS MEASUREMENT, AND REASONS FOR PURIFYING WATER.

AVAILABILITY: CALIFORNIA DEPARTMENT OF WATER RESOURCES, P.O. BOX 3388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004784

PUBLICATION DATE: 78

TITLE: THE WATER CYCLE.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONSERVATION (ENVIRONMENT); *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *HYDROLOGY; *INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; *SCIENCE EDUCATION; *WATER CYCLE; *WATER RESOURCES.

DESCRIPTIVE NOTE: 16MM, COLOR, SOUND, 5 1/2 MINUTES.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN IN CALIFORNIA DESCRIBE THE WATER CYCLE AND DISCUSS THE CONSERVATION OF WATER RESOURCES.

AVAILABILITY: CALIFORNIA DEPT OF WATER RESOURCES, BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004785

PUBLICATION DATE: 78

TITLE: WATER FOR FARMING.

DESCRIPTOR: *AGRICULTURE; *AUDIOVISUAL AIDS; *CALIFORNIA; *CONSERVATION (ENVIRONMENT); *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *FILMS; *INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; *RANCHING; SCIENCE EDUCATION; *WATER RESOURCES.

DESCRIPTIVE NOTE: 16MM, COLOR, SOUND 4 1/2 MINUTES.

ABSTRACT: DEWEY WATERDROP AND ELEMENTARY SCHOOL CHILDREN DESCRIBE THE USES OF WATER IN FARMING AND RANCHING IN CALIFORNIA. SOURCES OF WATER FOR CROPS AND WATER CONSERVATION ARE EMPHASIZED.

AVAILABILITY: CALIFORNIA DEPT OF WATER RESOURCES, PO BOX 388, SACRAMENTO, CA 95802. TO REVIEW FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004786

PUBLICATION DATE: 78

TITLE: ABOVE WATER INSPECTION AND TREATMENT OF WOODEN WATERFRONT STRUCTURES.

PERSONAL AUTHOR: GRAHAM, R. D.; AND OTHERS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSPECTION; *INSTRUCTIONAL MATERIALS; *MARINE ENVIRONMENT; OCEANOLOGY; *POST SECONDARY EDUCATION; QUALITY CONTROL; SLIDE TAPES; *SEA GRANT; *TREATMENT; *WATERFRONT STRUCTURES; *WOOD.

DESCRIPTIVE NOTE: 18 MINUTE-73 SLIDES.

ABSTRACT: PRESENTED IS THE THIRD IN A SERIES OF SLIDE-TAPES DESIGNED TO HELP OWNERS OF WATERFRONT STRUCTURES EXTEND THE SERVICE LIFE OF WOOD. THIS PROGRAM DETAILS HOW TO INSPECT THE ABOVE WATER PORTION OF WATERFRONT STRUCTURES AND HOW TO TREAT THEM TO STOP DETERIORATION.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY, SCHOOL OF FORESTRY, CORVALLIS, OR 97331 (503) 754-1702. $15.00 RENTAL FEE.

IRIS ACCESSION NUMBER: EW004787

PUBLICATION DATE: JUN 79

TITLE: BEST MANAGEMENT PRACTICES: A WATER PLANNER'S GUIDE TO LAND DISPOSAL.

DESCRIPTOR: ADMINISTRATION; *BEST MANAGEMENT PRACTICES; COST-EFFECTIVNESS; ENVIRONMENT; GOVERNMENT ROLE; *INDUSTRIAL WASTES; LEGISTATION; *LAND USE; *MANAGEMENT; NATURAL RESOURCES; *NON-POINT SOURCE POLLUTION; PLANNING; *REGIONAL PLANNING; SOILS; SLUDGE; *WATER QUALITY; *WASTE DISPOSAL; WATER RESOURCES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 300P.

ABSTRACT: RESIDUAL WASTES ARE AN IMPORTANT COMPONENT OF NONPOINT SOURCE POLLUTION. THE MANUAL DESCRIBES RESIDUAL WASTES FROM NINE MOST FREQUENTLY ENCOUNTERED SOURCES AND RELATES MANAGEMENT OF THESE WASTES TO BEST MANAGEMENT PRACTICES, (COST EFFECTIVE STATE-OF-THE-ART PRACTICES).

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $16.00

IRIS ACCESSION NUMBER: EW004788

PUBLICATION DATE: 79

TITLE: 1979 STATE OF THE ART MANUAL OF ON-SITE WASTEWATER MANAGEMENT.

DESCRIPTOR: EUTROPHICATION; FEDERAL PROGRAMS; *HEALTH; JOB TRAINING; LEGISLATION; *MANAGEMENT; *MAINTENANCE; NATURAL RESOURCES; ON-SITE WASTEWATER TREATMENT; PROGRAM ADMINISTRATION; *PLANNING; RESEARCH; *STATE-OF-THE-ART REVIEWS; SANITATION; SITE ANALYSIS; SOILS; *SEPTIC TANKS; *WASTEWATER TREATMENT; WATER RESOURCES; WATER POLLUTION CONTROL; *WASTE DISPOSAL.

DESCRIPTIVE NOTE: 108P.

ABSTRACT: THIS IS A SUMMARY OF DATA AND INFORMATION ON INDIVIDUAL ON-SITE DISPOSAL SYSTEMS COLLECTED BY THE 'ON-SITE' COMMITTEE OF THE NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION. CONTAINED IS INFORMATION RELATED TO ON-SITE SYSTEM EVALUATION, PLANNING, INSTALLATION, AND REGULATION. RELATED RESEARCH IN ENVIRONMENTAL HEALTH, ENGINEERING, HYDRO-GEOLOGY AND SOIL SCIENCE IS CITED.

AVAILABILITY: NATIONAL ENVIRONMANTAL HEALTH ASSOCIATION, 1200 LINCOLN STREET, SUITE 704, DENVER, CO 80203. PRICE: $5.00.

INSTITUTION NAME: NATIONAL ENVIRONMENTAL HEALTH ASSOCIATION.

IRIS ACCESSION NUMBER: EW004789

PUBLICATION DATE: AUG 79

TITLE: DEVELOPMENT AND APPLICATION OF A SIMPLIFIED STORMWATER MANAGEMENT MODEL.

PERSONAL AUTHOR: LAGER, JOHN A.

DESCRIPTOR: *DESIGN; *FACILITIES; *MANAGEMENT; MODELS; *SYSTEMS ANALYSIS; *SURFACE RUNOFF; STORMWATER; WATER RESOURCES; WATER POLLUTION CONTROL; WASTE DISPOSAL

DESCRIPTIVE NOTE: 138P.

ABSTRACT: DESCRIBES THE CREATION OF A SIMPLIFIED STORMWATER COMPUTER MANAGEMENT MODEL AND ITS APPLICATION IN PLANNING AND PRELIMINARY SIZING OF STORMWATER FACILITIES. THE MODEL INCREASED AWARENESS OF SYSTEMS INTERACTIONS AND INTRODUCES TIME AND PROBABILITY VARIANCE INTO STORMWATER ANALYSIS. INCLUDES A WORKING EXAMPLE, USING DATA FROM ROCHESTER, NEW YORK.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $11.00

IRIS ACCESSION NUMBER: EW004790

PUBLICATION DATE: 79

TITLE: WASTEWATER EFFLUENT GUIDELINES AND PERFORMANCE STANDARDS USING BEST TECHNOLOGY.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *EFFLUENTS; *GUIDELINES; *PERFORMANCE SPECIFICATIONS; *RESEARCH; *STANDARDS; *TECHNOLOGY; *WASTEWATER TREATMENT; WATER RESOURCES; WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 157P.

ABSTRACT: THIS BIBLIOGRAPHY INCLUDES CITATIONS THAT DESCRIBE MANDATORY WASTEWATER GUIDELINES AND STANDARDS IMPLEMENTED UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972. INCLUDED ARE STUDIES ON THE ECONOMIC AND ENVIRONMENTAL IMPACTS OF THE GUIDELINES ON INDUSTRIES AND

THEIR SURROUNDINGS. IT CONTAINS 157 ABSTRACTS, 9 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004791

PUBLICATION DATE: APR 75

TITLE: COST-EFFECTIVENESS ANALYSIS OF MUNICIPAL WASTEWATER REUSE.

PERSONAL AUTHOR: SCHMIDT, C. J.; ROSS, D. E.

DESCRIPTOR: BIBLIOGRAPHIES; *COST-EFFECTIVENESS; CASE STUDIES; ECONOMICS; *MUNICIPALITIES; MANAGEMENT; *PLANNING; *RECYCLING; SEWAGE; *WATER CONSERVATION; *WASTEWATER TREATMENT; *WATER RESOURCES; WASTE DISPOSAL; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 185P.

ABSTRACT: THE REPORT INVENTORIES EXISTING WASTEWATER REUSE SITES IN THE U.S., DESCRIBES PROCEDURES TO PERFORM A COST-EFFECTIVENESS ANALYSIS OF MUNICIPAL REUSE, AND APPLIES THE PROCEDURES DEVELOPED TO TWO CASE STUDY LOCATIONS. ALSO INCLUDED IS A BIBLIOGRAPHY OF INFORMATION ON THE ECONOMICS AND PRACTICE OF WASTEWATER REUSE.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $14.00

IRIS ACCESSION NUMBER: EW004795

PUBLICATION DATE: OCT 75

TITLE: PUBLIC INVOLVEMENT IN THE CORPS OF ENGINEERS PLANNING PROCESS.

PERSONAL AUTHOR: HANCHEY, JAMES R.

DESCRIPTOR: *CITIZEN PARTICIPATION; *CIVIL ENGINEERING; CONSERVATION; *DECISION MAKING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; NATURAL RESOURCES; PLANNING; *PROJECT PLANNING; *PUBLIC POLICY; WATER PROJECTS; *WATER RESOURCES; WATER CONSERVATION.

DESCRIPTIVE NOTE: 44P.

ABSTRACT: THIS REPORT DISCUSSES THE DESIGN, IMPLEMENTATION, AND MANAGEMENT OF PUBLIC INVOLVEMENT AS INTEGRAL PARTS OF THE U.S. ARMY CORPS OF ENGINEERS WATER RESOURCES PLANNING PROCESS. THE REPORT INCLUDES CHAPTERS ON DEVELOPING PUBLIC INVOLVEMENT PROGRAMS, FORUMS FOR OBTAINING PUBLIC INPUT, GUIDELINES FOR DEVELOPING PUBLIC INFORMATION PROGRAMS, MONITORING AND EVALUATION OF PROGRAMS, AND STAFF ORGANIZATION AND BUDGETING FOR PUBLIC INVOLVEMENT ACTIVITIES.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004796

PUBLICATION DATE: NOV 75

TITLE: PUBLIC PARTICIPATION IN WATER RESOURCES PLANNING: AN EVALUATION OF THE PROGRAMS OF 15 CORPS OF ENGINEERS DISTRICTS.

PERSONAL AUTHOR: RAGAN, JAMES F.

DESCRIPTOR: *CITIZEN PARTICIPATION; *CIVIL ENGINEERING; CONSERVATION; *DECISION MAKING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; NATURAL RESOURCES; PLANNING; *PROJECT PLANNING; *PUBLIC POLICY; WATER PROJECTS; *WATER RESOURCES; WATER CONSERVATION.

DESCRIPTIVE NOTE: 219P.

ABSTRACT: THIS REPORT CONTAINS AN EVALUATION OF THE PUBLIC INVOLVEMENT PROGRAMS OF 15 SELECTED CORPS OF ENGINEERS FIELD OFFICES. THE REPORT INCLUDES DESCRIPTIONS OF PUBLIC PARTICIPATION PROGRAMS EXISTING IN 1973, AN EVALUATION OF DISTRICT POLICIES, ORGANIZATIONS, AND RESOURCES FOR PUBLIC PARTICIPATION, AND RECOMMENDS METHODS FOR IMPROVEMENT.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $13.00.

IRIS ACCESSION NUMBER: EW004797

PUBLICATION DATE: DEC 74

TITLE: WATER QUALITY MANAGEMENT PLANNING FOR URBAN RUNOFF.

DESCRIPTOR: BIBLIOGRAPHIES; *CITY PROBLEMS; *CITY PLANNING; COST EFFECTIVENESS; DATA COLLECTION; GLOSSARIES; *MANAGEMENT; *PLANNING; STATE-OF-THE-ART REVIEWS; *SURFACE RUNOFF; *URBAN AREAS; *WATER QUALITY; *WATER RESOURCES; *WATER POLLUTION CONTROL; WASTE DISPOSAL.

DESCRIPTIVE NOTE: 189P.

ABSTRACT: THIS IS A GUIDE TO HELP STATE AND LOCAL PLANNERS DETERMINE DATA GENERATION NECESSARY TO QUANTIFY THE URBAN NON-POINT WATER POLLUTION PROBLEM IN A LOCAL PLANNING AREA. IT PROVIDES ASSISTANCE IN EVALUATING THE COST-EFFECTIVENESS OF VARIOUS CONTROL PRACTICES. INCLUDED ARE A STATE-OF-THE ART REVIEW, AN EXTENSIVE BIBLIOGRAPHY AND A GLOSSARY ON URBAN STORM WATER RUN-OFF.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $14.00

IRIS ACCESSION NUMBER: EW004798
PUBLICATION DATE: 78

TITLE: NITROGEN REMOVAL IN SEWAGE TREATMENT SYSTEMS. VOLUME 1. 1964-1977.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; FACILITIES; *NITROGEN REMOVAL; *OPERATIONS (WASTEWATER); *RESEARCH; RECYCLING; *SEWAGE; *WASTEWATER TREATMENT; WASTE DISPOSAL; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 180P.

ABSTRACT: STUDIES ON NITROGEN REMOVAL IN SEWAGE TREATMENT SYSTEMS ARE CITED. THEY COVER CHLORINATION, DENITRATION, NITRIFICATION, MICROBIOLOGY, TERTIARY SEWAGE SYSTEMS, AMMONIA STRIPPING AND PROCESS DESIGN. THIS UPDATED BIBLIOGRAPHY CONTAINS 219 ABSTRACTS.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004799

PUBLICATION DATE: 79

TITLE: WASTE TREATMENT BY REVERSE OSMOSIS AND MEMBRANE PROCESSES. PART 2. INDUSTRIAL. VOLUME 2.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *INDUSTRY; *MEMBRANES; *OPERATIONS (WASTEWATER TREATMENT); *REVERSE OSMOSIS; *RESEARCH; RECYCLING; WATER QUALITY; WASTE DISPOSAL; WATER RESOURCES; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 112P.

ABSTRACT: CITED ARE STUDIES THAT COVER REVERSE OSMOSIS, ULTRAFILTRATION, ELECTRODIALYSES, ULTRATHIS, AND OTHER OSMOTIC PROCESSES. THEY ALSO INCLUDE DEVELOPMENT OF THE MEMBRANES, PHYSICAL PROPERTIES, FABRICATION, AND PERFORMANCE. (THIS UPDATED BIBLIOGRAPHY CONTAINS 112 ABSTRACTS, 17 OF WHICH ARE NEW ENTERIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004800

PUBLICATION DATE: 79

TITLE: WASTE TREATMENT BY REVERSE OSMOSIS AND MEMBRANE PROCESSES. PART 1. SEWAGE.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *MEMBRANE PROCESSES; *OSMOSIS; *RESEARCH; *REVERSE OSMOSIS; SEWAGE; *WASTEWATER TREATMENT; WASTE DISPOSAL; WATER RESOURCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 110P.
ABSTRACT: INCLUDED IN THIS BIBLIOGRAPHY ARE STUDIES ON THE TREATMENT OF SEWAGE BY OSMOSIS, ULTRAFILTRATION, ELECTRODIALYSIS, AND OTHER OSMOTIC PROCESSES. STUDIES RELATE TO DESIGN, PERFORMANCE, AND THE VERSATILITY OF MANY OF THESE MEMBRANES WITH RESPECT TO THEIR USE. (THIS UPDATED BIBLIOGRAPHY CONTAINS 110 ABSTRACTS, 13 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION).

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004801

PUBLICATION DATE: JUL 79

TITLE: EUTROPHICATION VOLUME 3. AUGUST, 1977-JULY, 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; CHEMISTRY; ECOLOGY; *EUTROPHICATION; *LAKES; MODELS; RESEARCH; *STREAMS; WASTE DISPOSAL; WATER RESOURCES; *WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 128P.

ABSTRACT: INCLUDED IN THIS BIBLIOGRAPHY ARE SELECTED ABSTRACTS ON MANY ASPECTS OF EUTROPHICATION, INCLUDING RESEARCH ON PRIMARY PRODUCTIVITY, WATER CHEMISTRY, ECOLOGY, THE INFLUENCE AND IMPACT OF NUTRIENTS ON LAKES AND STREAMS, CONTROL TECHNIQUES, AND MATHEMATICAL MODELING. THIS UPDATED BIBLIOGRAPHY CONTAINS 125 ABSTRACTS, 60 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004802

PUBLICATION DATE: OCT 73

TITLE: PROBLEMS AND APPROACHES TO AREAWIDE WATER QUALITY MANAGEMENT.

PERSONAL AUTHOR: HOWE, RICHARD S.; WHITE, NICHOLOS L.

DESCRIPTOR: ADMINISTRATIVE PROBLEMS; CITY PLANNING; FEDERAL AID; LEGAL PROBLEMS; *LEGISLATION; *MANAGEMENT; MODELS; POLICIES; *SEWAGE; WATER QUALITY; WASTEWATER TREATMENT; *WATER RESOURCES; *WATER POLLUTION CONTROL; WASTE DISPOSAL

DESCRIPTIVE NOTE: 180P.

ABSTRACT: THIS REPORT DEALS WITH THE ISSUE OF THE AUTHORITY OF WASTE TREATMENT MANAGEMENT AGENCIES TO CONFORM TO THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972. INCLUDED ARE AN ASSESSMENT OF CAPABILITY BY A SURVEY OF EXISTING WASTE TREATMENT MANAGEMENT AGENCIES AND A LEGAL ANALYSIS OF STATE AND FEDERAL LEGISLATION.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA

22161. PRICE: $12.00

IRIS ACCESSION NUMBER: EW004807

PUBLICATION DATE: 73

TITLE: WATER ATLAS OF THE UNITED STATES.

PERSONAL AUTHOR: GERAGHTY, JAMES J.; AND OTHERS.

DESCRIPTOR: *ATLASES; CONSERVATION (ENVIRONMENT); *DATA; GEOGRAPHY; *HYDROLOGY; *MAPS; RECREATION; *REFERENCE MATERIALS; WATER POLLUTION CONTROL; WATER QUALITY; *WATER RESOURCES; *WATER USE.

DESCRIPTIVE NOTE: 130P.

ABSTRACT: CONTAINED IN THIS UPDATED EDITION ARE 122 MAPS COVERING SUBJECTS RELATED TO WATER RESOURCES, WATER USE, WATER POLLUTION AND WATER QUALITY, WATER CONSERVATION, WATER LAW, AND WATER-BASED RECREATION. THIRTY-SIX (36) OF THE MAPS IN THIS EDITION COVER ALASKA 8 HAWAII.

AVAILABILITY: WATER INFORMATION CENTER, INC., THE NORTH SHORE ATRIUM, 6800 JERICHO TURNPIKE, SYOSSET, NY 11791. PRICE: $40.00

IRIS ACCESSION NUMBER: EW004808

PUBLICATION DATE: 79

TITLE: NITROGEN REMOVAL IN SEWAGE TREATMENT SYSTEMS. VOLUME 2. 1978-JULY, 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *FACILITIES; *NITROGEN; *OPERATIONS (WASTEWATER); RESEARCH; RECYCLING; WASTE DISPOSAL; WATER RESOURCES; *WATER POLLUTION CONTROL; *WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 100P.

ABSTRACT: INCLUDED IN THIS BIBLIOGRAPHY ARE STUDIES ON NITROGEN REMOVAL IN SEWAGE. INCLUDED ARE REPORTS ON CHLORINATION, DENITRATION, NITRIFICATION, MICROBIOLOGY, TERTIARY SEWAGE TREATMENT, AMMONIA STRIPPING AND PROCESS DESIGN. THIS UPDATED BIBLIOGRAPHY CONTAINS 100 ABSTRACTS, 72 OF WHICH ARE NEW TO THE PREVIOUS EDITION.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004809

PUBLICATION DATE: 79

TITLE: LEGAL, INSTITUTIONAL AND SOCIAL ASPECTS OF IRRIGATION AND DRAINAGE AND WATER RESOURCES PLANNING AND MANAGEMENT.

DESCRIPTOR: AGRICULTURE; *CONFERENCE REPORTS; DEVELOPING NATIONS; *DRAINAGE; ENGINEERING; FEDERAL LEGISLATION; GOVERNMENT ROLE; *INSTITUTIONS; *IRRIGATION; *LEGISLATION; LEGAL PROBLEMS; *MANAGEMENT; MODELS; *NATURAL RESOURCES; *PLANNING; POLICIES; SOCIAL PLANNING; *SOCIAL INFLUENCES; TECHNOLOGY; UTILITIES; *WATER RESOURCES; IRRIGATION; DRAINAGE

DESCRIPTIVE NOTE: 895P.

ABSTRACT: INCLUDED ARE CONFERENCE PROCEEDINGS OF THE AMERICAN SOCIETY OF CIVIL ENGINEER'S 1978 NATIONAL SPECIALITY CONFERENCE. ATTORNEYS, ECONOMISTS, PLANNERS AND SOCIOLOGISTS, AS WELL AS ENGINEERS, PARTICIPATED. NUMEROUS PAPERS WERE PRESENTED WITH MANY DIRECTED AT WATER LAWS, INSTITUTIONAL, SOCIAL AND ECONOMIC CONSIDERATIONS OF IRRIGATION, DRAINAGE, AND WATER RESOURCES.

AVAILABILITY: AMERICAN SOCIETY OF CIVIL ENGINEERS, 345 EAST 47TH STREET, NEW YORK, NY 10017. PRICE: $40.00.

IRIS ACCESSION NUMBER: EW004812

PUBLICATION DATE: 78

TITLE: THE TISKILWA STORY.

DESCRIPTOR: *AUDIOVISUAL AIDS; CITIZEN PARTICIPATION; *CONSTRUCTION; *DAMS (EARTHEN); EROSION PREVENTION; FEDERAL GOVERNMENT; *FILMS; *FLOOD CONTROL; GOVERNMENT ROLE; *INSTRUCTIONAL MATERIALS; *ILLINOIS; SURFACE RUNOFF; WATER RESOURCES; *WATERSHEDS.

DESCRIPTIVE NOTE: 16MM FILM

ABSTRACT: DESCRIBED ARE THE PROCEDURES UTILIZED BY THE CITIZENS OF TISKILWA, ILLINOIS, TO OBTAIN FEDERAL FUNDS FOR CONSTRUCTION OF FOUR EARTHEN DAMS FOR FLOOD CONTROL. THE CONSTRUCTION OF THE LARGEST DAM IS ILLUSTRATED.

AVAILABILITY: MODERN TALKING PICTURE SERVICE, INC., CATERPILLAR FILM LIBRARY, 1687 ELMHURST ROAD, ELK GROVE VILLAGE, IL 60007. ON LOAN FREE OF CHARGE.

IRIS ACCESSION NUMBER: EW004814

PUBLICATION DATE: NOV 76

TITLE: WASTEWATER FLOW MEASUREMENT IN SEWERS USING ULTRASOUND.

PERSONAL AUTHOR: ANDERSON, R. J.; AND OTHERS.

DESCRIPTOR: *ACOUSTICS; COST EFFECTIVENESS; *FLOW MEASUREMENT; MEASUREMENT TECHNIQUES; MAINTENANCE; *SANITATION IMPROVEMENT; *SEWERS; *ULTRASONICS; *WASTE DISPOSAL.

DESCRIPTIVE NOTE: 96P.

ABSTRACT: DEMONSTRATES AND EVALUATES AN INNOVATION TECHNIQUE FOR MEASUREMENTS OF SEWAGE VOLUME FLOW, UTILIZING ULTRASONIC MEASUREMENTS OF DEPTH AND VELOCITY. RESULTS INDICATE THAT THE METHODOLOGY IS ECONOMICALLY FEASIBLE AND THAT THE EQUIPMENT IS ACCURATE, FUNCTIONALLY SOUND AND SUITABLE FOR A NEWER ENVIRONMENT.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $9.00

IRIS ACCESSION NUMBER: EW004815

PUBLICATION DATE: JUN 76

TITLE: CONTROL OF WATER POLLUTION FROM CROPLAND: VOLUME II-AN OVERVIEW.

PERSONAL AUTHOR: STEWART, B. A.; AND OTHERS.

DESCRIPTOR: *AGRICULTURE; ENGINEERING; *EROSION; FERTILIZERS; INSECTICIDES; MODELS; NATURAL RESOURCES; *NON POINT SOURCE POLLUTION; *PESTICIDES; POLLUTION; *RURAL AREAS; *SURFACE RUNOFF; *SEDIMENT CONTROL; *WATER POLLUTION CONTROL; WATER RESOURCES

DESCRIPTIVE NOTE: 187P.

ABSTRACT: IDENTIFIES, DESCRIBES AND EVALUATES ENGINEERING AND AGRONOMIC TECHNIQUES TO CONTROL SEDIMENT, NUTRIENT AND PESTICIDE LOSSES FROM CROPLAND. METHODOLOGY IS DEVELOPED TO FACILITATE IDENTIFICATION OF POTENTIAL POLLUTANT SOURCES, SELECT APPROPRIATE CONTROLS, AND ANALYZE ECONOMIC FEASIBILITY.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $12.00

IRIS ACCESSION NUMBER: EW004816

PUBLICATION DATE: MAR 75

TITLE: CONTRIBUTIONS OF URBAN ROADWAY USAGE TO WATER POLLUTION.

PERSONAL AUTHOR: SHAHEEN, DONALD G.

DESCRIPTOR: AIR POLLUTION CONTROL; ASBESTOS; GREASE; HEAVY METALS; INDUSTRY; LAND USE; *MOTOR VEHICLES; PARTICULATES; PETROLEUM; *ROADS; RUBBER; SOLIDS; *STORM RUNOFF; SURFACE RUNOFF; *STREET SURFACE CONTAMINANTS; TRAFFIC; TRANSPORTATION; *URBAN AREAS; *WATER POLLUTION CONTROL; WASHINGTON, D.C.

DESCRIPTIVE NOTE: 223P.

ABSTRACT: PRESENTED IS A CASE STUDY OF THE CONTRIBUTION OF VEHICULAR TRAFFIC TO URBAN ROADWAY POLLUTION IN WASHINGTON, D.C. SIGNIFICANT LEVELS OF HEAVY METALS, ASBESTOS, PETROLEUM DEGREDATION PRODUCTS AND INORGANIC PARTICULATE MATERIALS WERE MEASURED. THESE CONTAMINANTS WERE CARRIED VIA STORM RUNOFF TO THE METROPOLITAN AREA, RESULTING IN SERIOUS POLLUTION PROBLEMS.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $19.00.

IRIS ACCESSION NUMBER: EW004817

PUBLICATION DATE: DEC 74

TITLE: URBAN STORMWATER MANAGEMENT AND TECHNOLOGY: AN ASSESSMENT.

PERSONAL AUTHOR: LAGER, JOHN A.; SMITH, WILLIAM G.

DESCRIPTOR: *CITY PROBLEMS; COST EFFECTIVENESS; DRAINAGE; EVALUATION METHODS; HYDRAULICS; INTERDISCIPLINARY APPROACH; *MANAGEMENT; METROPOLITAN AREAS; MATHEMATICAL MODELS; RESEARCH; STATE-OF-THE-ART REVIEWS; *SURFACE RUNOFF; *SEWAGE; STORM SEWERS; *SEWERS; *TECHNOLOGY; UTILITIES; URBAN AREAS; WASTE DISPOSAL; *WATER RESOURCES; WATER POLLUTION CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 442P.

ABSTRACT: INCLUDED ARE ASSESSMENTS OF URBAN STORMWATER PROJECTS, REPRESENTATIVE OF THE STATE-OF-THE-ART IN ABATEMENT THEORY MANAGEMENT AND TECHNOLOGY. STRESSED IS THE IMPORTANCE OF THE INTEGRATED USE OF CONTROL AND TREATMENT SYSTEMS WITH AN AREAWIDE, MULTIDISCIPLINARY PERSPECTIVE.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $23.00.

IRIS ACCESSION NUMBER: EW004819

PUBLICATION DATE: FEB 75

TITLE: WATER RESOURCES DECISION MAKING ON THE BASIS OF THE PUBLIC INTEREST.

PERSONAL AUTHOR: ORTOLANO, LEONARD.

DESCRIPTOR: *CITIZEN PARTICIPATION; *CIVIL ENGINEERING; CONSERVATION; *DECISION MAKING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; NATURAL RESOURCES; PLANNING; *PROJECT PLANNING; *PUBLIC POLICY; WATER PROJECTS; *WATER RESOURCES; WATER CONSERVATION.

DESCRIPTIVE NOTE: 35P.

ABSTRACT: THIS REPORT DISCUSSES ALTERNATIVE PERSPECTIVES THAT HAVE BEEN SUGGESTED FOR DEFINING THE PUBLIC INTEREST AND PROVIDES AN OVERVIEW OF THE DECISION-MAKING INVOLVED IN A TYPICAL WATER RESOURCES PLANNING STUDY. IT THEN EXAMINES VARIOUS APPROACHES TO DETERMINING THE PUBLIC INTEREST IN PREAUTHORIZATION PLANNING AND DECISION-MAKING. IT ALSO PRESENTS AN ARGUMENT IN SUPPORT OF CURRENT TRENDS AWAY FROM RELIANCE ON ECONOMIC EFFICIENCEY AS A BASIS FOR DEFINING THE PUBLIC INTEREST, AND TOWARD THE DIRECT INVOLVEMENT OF

CITIZENS IN DETERMINING THE FACTORS AND WEIGHTS USED IN DEFINING THE PUBLIC INTEREST.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $7.00.

IRIS ACCESSION NUMBER: EW004821

PUBLICATION DATE: MAY 75

TITLE: STRUCTURING COMMUNICATIONS PROGRAMS FOR PUBLIC PARTICIPATION IN WATER RESOURCES PLANNING.

PERSONAL AUTHOR: BISHOP, A. BRUCE.

DESCRIPTOR: *CITIZEN PARTICIPATION; *CIVIL ENGINEERING; CONSERVATION; *DECISION MAKING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; NATURAL RESOURCES; PLANNING; *PROJECT PLANNING; *PUBLIC POLICY; WATER PROJECTS; *WATER RESOURCES; WATER CONSERVATION.

DESCRIPTIVE NOTE: 125P.

ABSTRACT: THIS REPORT DESCRIBES METHODS AND TECHNIQUES FOR PLANNER-CITIZEN COMMUNICATION WHICH WILL ENHANCE THE LEVEL OF PUBLIC PARTICIPATION IN THE WATER PROJECT PLANNING PROCESS AND WILL PERMIT CITIZENS AND PLANNERS TO WORK EFFECTIVELY IN ARRIVING AT DECISIONS WHICH BETTER SERVE THE PUBLIC. THIS REPORT DESCRIBES THE CORPS OF ENGINEERS PLANNING PROCESS AND DEFINES THE INFORMATION GENERATED DURING THE PUBLIC PARTICIPATION ACTIVITIES.
AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $10.00

IRIS ACCESSION NUMBER: EW004822

PUBLICATION DATE: JUL 74

TITLE: THE ROLE OF CITIZEN ADVISORY GROUPS IN WATER RESOURCES PLANNING.

PERSONAL AUTHOR: ERTEL, MADGE.

DESCRIPTOR: *CITIZEN PARTICIPATION; CIVIL ENGINEERING; CONSERVATION; *DECISION MAKING; ENGINEERING; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; *GUIDELINES; NATURAL RESOURCES; NEW ENGLAND RIVER BASIN COMMISSION (NERBC); *PLANNING; *PROJECT PLANNING; *PUBLIC POLICY; WATER PROJECTS; *WATER RESOURCES; WATER CONSERVATION.

DESCRIPTIVE NOTE: 135P.

ABSTRACT: REPORTED ARE CASE-STUDY OBSERVATIONS AND ANALYSES OF CITIZEN ADVISORY GROUPS OPERATING IN CONJUNCTION WITH PLANNING FUNCTIONS OF THE NERBC. THE REPORT CONCLUDES THAT WHILE CITIZEN ADVISORY GROUPS CAN SERVE AS ONLY ONE COMPONENT OF A PUBLIC PARTICIPATION PROGRAM, THEY CAN PERFORM CERTAIN VALUABLE FUNCTIONS ON THEIR OWN WHILE ALSO PROVIDING A KEY LINK TO OTHER STRATEGIES. THE REPORT CONCLUDES WITH A SET OF GUIDELINES DERIVED FROM THE RESEARCH FOR THE USE OF PLANNING AGENCIES SEEKING TO UTILIZE CITIZEN ADVISORY GROUPS.

AVAILABILITY: NTIS, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $10.00.

IRIS ACCESSION NUMBER: EW004823

PUBLICATION DATE: FEB 74

TITLE: MUNICIPAL SEWAGE TREATMENT; A COMPARISON OF ALTERNATIVES.

DESCRIPTOR: *CITY PROBLEMS; COST EFFECTIVENESS; *DESIGN; ENERGY; *ECONOMICS; ENVIRONMENT; *FACILITIES; *LIQUID TREATMENT; *PLANNING; RECORD KEEPING; *SLUDGE; *SEWAGE; SYSTEMS APPROACH; *URBAN AREAS; WATER RESOUCES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 210P.

ABSTRACT: THE REPORT IS A SUMMARY OF INFORMATION NECESSARY TO CONSIDER IN SELECTING AN APPROPRIATE WASTEWATER TREATMENT SCHEME FOR A MUNICIPALITY. INCLUDES DATA TO ENABLE TREATMENTS TO BE COMPARED ON AN ENERGY, ENVIRONMENTAL AND ECONOMIC BASIS.

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. PRICE: $4.85.

IRIS ACCESSION NUMBER: EW004824

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: CHEMISTRY/BACTERIOLOGY. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: BACTERIOLOGY; CHEMISTRY; *CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *LABORATORY METHODS; PUBLIC HEALTH; TECHNOLOGY; *WATER TREATMENT; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 266P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. DISCUSSED IN THIS SET IS THE TREATMENT OF WATER FOR HUMAN CONSUMPTION INCLUDING SUCH TOPICS AS: WATERBORNE DISEASES; WATER SAMPLING PROCEDURES; COAGULATION PROCESSES; CORROSION CONTROL; SOLUTION AND DRY CHEMICAL FEEDERS; AND TESTS AND REMEDIES FOR MANGANESE, HARDNESS, AND IRON. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITIY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004825

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: CHLORINATION. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: *CHLORINATION; CHEMISTRY; *CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; *INSTRUCTIONAL MATERIALS; JOB SKILLS; LABORATORY METHODS; PUBLIC HEALTH; TECHNOLOGY; *UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 240P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE NINE COMPETENCIES FOR CHLORINATION OF WATER INCLUDING: THE PROCESS; CHLORINE RESIDUALS; GAS CHLORINATORS-CONSTRUCTION, USE, AND SAFETY; AND HYPOCHLORITE SOLUTION PREPARATION. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004826

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: CROSS-CONNECTIONS. STUDENTS'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *PLUMBING; *PUBLIC HEALTH; TECHNOLOGY; UTILITIES; *WATER QUALITY; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 84P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE TWO COMPETENCIES FOR CROSS-CONNECTIONS. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004827

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: DISTRIBUTION SYSTEMS. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: *CERTIFICATION; DISINFECTION; *ENVIRONMENTAL TECHNICIAN; *EQUIPMENT; *INSTRUCTIONAL MATERIALS; JOB SKILLS; PLUMBING; PUBLIC HEALTH; TECHNOLOGY; *WATER QUALITY; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 180P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE SIX COMPETENCIES FOR WATER DISTRIBUTION SYSTEMS INCLUDING: TYPES OF PIPES AND VALVES; METER TYPES; STORAGE TYPES AND PARTS. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004828

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: FILTRATION. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: *CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; EQUIPMENT; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; PUBLIC HEALTH; TECHNOLOGY; UTILITIES; *WATER POLLUTION CONTROL; FILTRATION.

DESCRIPTIVE NOTE: 102P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE SIX COMPETENCIES FOR FILTRATION INCLUDING: GRAVITY AND PRESSURE FILTERS; FILTER FAULTS; AND BACKWASHING PROCEDURES AND FREQUENCY. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES; AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004829
PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY; FLUORIDATION. EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CHEMICAL REACTIONS; *CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; FLUORIDATION; *INSTRUCTIONAL MATERIALS; JOB SKILLS; PUBLIC HEALTH; SAFETY; TECHNOLOGY; *UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 38P.

ABSTRACT: THIS DOCUMENT IS PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE THREE COMPETENCIES FOR FLUORIDATION OF WATER. EACH LESSON CONTAINS A SET OF OBJECTIVES, LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004830

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: GENERAL PLANT OPERATION. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: *CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; *INSTRUCTIONAL MATERIALS; JOB SKILLS; *OPERATION ANALYSIS; PUBLIC HEALTH; TECHNOLOGY; *UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 70P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE SEVEN COMPETENCIES FOR GENERAL PLANT OPERATION INCLUDING: WATER SUPPLY REGULATIONS; WATER SOURCES; MONTHLY REPORTS; DEMAND VARIATIONS; AND WATER SHUT OFF GUIDE. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004831
PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: HYDRAULICS. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: *CERTIFICATION; CALCULATION; *ENVIRONMENTAL TECHNICIAN; *HYDRAULICS; *INSTRUCTIONAL MATERIALS; JOB SKILLS; PUBLIC HEALTH; TECHNOLOGY; UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 108P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE THREE COMPETENCIES FOR HYDRAULICS. EACH UNIT CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004832

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: PUMPS. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CERTIFICATION; *EQUIPMENT; ENVIRONMENTAL TECHNICIAN; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; *MAINTENANCE; PUBLIC HEALTH; PUMPS; TECHNOLOGY; UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 42

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE THREE COMPETENCIES FOR THE SELECTION, OPERATION, AND MAINTENANCE OF PUMPS. EACH UNIT CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004833
PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: SPRINGS. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; *FACILITY GUIDELINES; *INSTRUCTIONAL MATERIALS; JOB SKILLS; PUBLIC HEALTH; *SPRINGS; TECHNOLOGY; UTILITIES; *WATER RESOURCES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 18P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE THE COMPETENCIES FOR CONSTRUCTING AND PROTECTING SPRING BASINS. EACH UNIT CONTAINS A SET OF OBJECTIVIES IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004834

PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: TASTE, ODOR, & COLOR. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CERTIFICATION; *ENVIRONMENTAL TECHNICIAN; EQUIPMENT; *INSTRUCTIONAL MATERIALS; *JOB SKILLS; *LABORATORY PROCEDURES; *OPERATION ANALYSIS; PUBLIC HEALTH; TECHNOLOGY; UTILITIES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 74P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. PRESENTED IN THIS VOLUME ARE THE COMPETENCIES FOR TASTE, ODOR, AND COLOR CONTROL. EACH UNIT CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004835
PUBLICATION DATE: DEC 78

TITLE: WATER TREATMENT TECHNOLOGY: WELLS. STUDENT'S COPY AND EVALUATOR'S COPY.

PERSONAL AUTHOR: ROSS-HARRINGTON, MELINDA; KINCAID, G. DAVID.

DESCRIPTOR: CERTIFICATION; *ENVIRONMENTAL TECHNICIANS; GROUND WATER; *INSTRUCTIONAL MATERIALS; JOB SKILLS; PUBLIC HEALTH; TECHNOLOGY; UTILITIES; *WATER RESOURCES; WATER POLLUTION CONTROL; WELLS.

DESCRIPTIVE NOTE: 68P.

ABSTRACT: THESE DOCUMENTS, THE STUDENT WORKBOOK AND EVALUATOR'S COPY, ARE PART OF A SERIES OF MANUALS TO ASSIST WATER QUALITY CONTROL PERSONNEL IN PREPARING FOR CERTIFICATION EXAMINATIONS. DISCUSSED IN THIS SET IS THE CONSTRUCTION AND OPERATION OF DRILLED AND DEEP WELLS INCLUDING SUCH TOPICS AS: DUG, DRIVEN, AND DRILLED WELLS; AQUIFER TYPES; DEEP WELL CONSTRUCTION DETAILS; YIELD AND DRAWDOWN TEST; AND WELL SCREENS. EACH LESSON CONTAINS A SET OF OBJECTIVES, IDENTIFIED LEARNING ACTIVITIES, AND AN EVALUATION ACTIVITY.

AVAILABILITY: WEST VIRGINIA BUREAU OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION.

IRIS ACCESSION NUMBER: EW004836

PUBLICATION DATE: MAY 79

TITLE: WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION AND WATER RESOURCES MATERIALS.

DESCRIPTOR: *ABSTRACTS; AUDIOVISUAL AIDS; ENVIRONMENTAL EDUCATION; INDEXES (LOCATERS); *INFORMATION DISSEMINATION; *INSTRUCTIONAL MATERIALS; POLLUTION; *TECHNOLOGY; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 360P.

ABSTRACT: PRESENTED IS A COMPILATION OF OVER 3,000 ABSTRACTS ON PRINT AND NON-PRINT MATERIALS RELATED TO WATER QUALITY AND WATER RESOURCES EDUCATION. ENTRIES ARE INCLUDED FROM ALL LEVELS OF GOVERNMENTAL SOURCES, PRIVATE CONCERNS, AND EDUCATIONAL INSTITUTIONS. EACH ENTRY INCLUDES: TITLE, AUTHOR, CROSS REFERENCES, DESCRIPTORS, AND AVAILABILITY.

AVAILABILITY: EPA INFORMATION DISSEMINATION PROJECT, OHIO STATE UNIVERSITY, 1200 CHAMBERS RD., 3RD FLOOR, COLUMBUS OH 43212 (FREE).

INSTITUTION NAME: OFFICE OF WATER PROGRAM OPERATIONS (EPA), CINCINNATI, OHIO. NATIONAL TRAINING AND OPERATIONAL TECHNOLOGY CENTER.

IRIS ACCESSION NUMBER: EW004837
PUBLICATION DATE: NOV 79

TITLE: BASIC INSTRUCTIONAL TECHNOLOGY. PARTICIPANT REFERENCE MANUAL.

DESCRIPTOR: AUDIOVISUAL AIDS; BEHAVIORAL OBJECTIVES; COMMUNICATION SKILLS; *JOB SKILLS; PROFESSIONAL DEVELOPMENT; *SKILL DEVELOPMENT; TASK ANALYSIS; *TEACHING EXPERIENCE; *TRAINING TECHNIQUES; *WATER POLLUTION CONTROL.

ABSTRACT: PRESENTED ARE THE STUDENT TEXT MATERIALS THAT ACCOMPANY A WORKSHOP TO GIVE THOSE WITH NO PREVIOUS TEACHING EXPERIENCE THE BASIC SKILLS NEEDED TO CONDUCT SIMPLE TRAINING PROGRAMS. THE BASIC SKILLS ADDRESSED INCLUDE: IDENTIFYING INSTRUCTIONAL NEEDS, SPECIFYING OBJECTIVES, PLANNING THE INSTRUCTION, LOCATING SUPPORT MATERIALS, CONDUCTING THE INSTRUCTION, AND EVALUATING PERFORMANCE. THE WORKSHOP CONSISTS OF FOURTEEN UNITS WHICH MAY BE GIVEN ON A VARIETY OF SCHEDULES.

INSTITUTION NAME: DEVELOPMENT AND EVALUATION ASSOCIATES, INC., SYRACUSE, NY.

IRIS ACCESSION NUMBER: EW004838

PUBLICATION DATE: NOV 79

TITLE: BASIC INSTRUCTIONAL TECHNOLOGY. STAFF GUIDE.

DESCRIPTOR: AUDIOVISUAL AIDS; BEHAVIORAL OBJECTIVES; COMMUNICATION SKILLS; INSTRUCTIONAL STAFF; *PROFESSIONAL DEVELOPMENT; SKILL DEVELOPMENT; TASK ANALYSIS; *TEACHING EXPERIENCE; *TRAINING TECHNIQUES; WATER POLLUTION CONTROL.

ABSTRACT: THIS STAFF GUIDE IS DESIGNED FOR PERSONNEL RESPONSIBLE FOR ON-THE-JOB TRAINING OF WORK-RELATED TOPICS. EMPHASIS IS GIVEN TO THE DEVELOPMENT OF THE BASIC SKILLS OF IDENTIFYING INSTRUCTIONAL NEEDS, SPECIFYING OBJECTIVES, PLANNING INSTRUCTION, LOCATING SUPPORT MATERIALS, CONDUCTING INSTRUCTION, AND EVALUATING PERFORMANCE. INSTRUCTIONAL ACTIVITIES INCLUDE: LECTURES, GUIDED DISCUSSIONS, DEMONSTRATIONS, INDIVIDUAL ASSIGNMENTS, AND READINGS. THE WORKSHOP CONSISTS OF FOURTEEN UNITS WHICH MAY BE CONDUCTED ON A VARIETY OF SCHEDULES.

INSTITUTION NAME: DEVELOPMENT AND EVALUATION ASSOCIATES, INC., SYRACUSE, NY.

IRIS ACCESSION NUMBER: EW004839

PUBLICATION DATE: NOV 79

TITLE: ADVANCED INSTRUCTIONAL TECHNOLOGY. PARTICIPANT REFERENCE MANUAL.

DESCRIPTOR: AUDIOVISUAL AIDS; BEHAVIORAL OBJECTIVES; *COMMUNICATION SKILLS; *INSTRUCTION; PROFESSIONAL DEVELOPMENT; *SKILL DEVELOPMENT; TASK ANALYSIS; TEACHING EXPERIENCE; *TRAINING TECHNIQUES; WATER POLLUTION CONTROL.

ABSTRACT: THIS PARTICIPANT MANUAL WAS DEVELOPED TO ACCOMPANY A WORKSHOP TO PROVIDE ENVIRONMENTAL PROTECTION PROFESSIONALS WITH SKILLS NEEDED TO PLAN AND DELIVER TRAINING PROGRAMS. EACH OF THE TEN UNITS CONTAINS A UNIT OVERVIEW, CONTENT SUMMARIES, ASSIGNMENTS, AND FIGURES. THE MATERIALS ARE DESIGNED TO STRENGTHEN SKILLS IN DESIGNING INSTRUCTIONAL OBJECTIVES, EVALUATING PERFORMANCE, CHOOSING INSTRUCTIONAL METHODS, AND MANAGING INSTRUCTION.

INSTITUTION NAME: DEVELOPMENT AND EVALUATION ASSOCIATES, INC., SYRACUSE, NY.

IRIS ACCESSION NUMBER: EW004840

PUBLICATION DATE: NOV 79

TITLE: ADVANCED INSTRUCTIONAL TECHNOLOGY. STAFF GUIDE.

DESCRIPTOR: AUDIOVISUAL AIDS; BEHAVIORAL OBJECTIVES; COMMUNICATION SKILLS; *INSTRUCTIONAL STAFF; PROFESSIONAL DEVELOPMENT; *SKILL DEVELOPMENT; TASK ANALYSIS; *TEACHING EXPERIENCE; *TRAINING TECHNIQUES; WATER POLLUTION CONTROL.

ABSTRACT: THIS STAFF GUIDE ACCOMPANIES A TEN-UNIT WORKSHOP DESIGNED TO ASSIST SUPERVISORS AND OTHER PERSONNEL RESPONSIBLE FOR TRAINING TO STRENGTHEN AND EXPAND INSTRUCTIONAL EFFECTIVENESS. SKILLS ADDRESSED INCLUDE: DESIGNING INSTRUCTIONAL OBJECTIVES, EVALUATING ACHIEVEMENT, CHOOSING INSTRUCTIONAL STRATEGIES, UTILIZING MEDIA, AND MANAGING INSTRUCTION. THE MATERIAL IS DESIGNED FOR FLEXIBILITY IN CHOICE AND SEQUENCE OF UNITS AS WELL AS SCHEDULE OF PRESENTATION.

INSTITUTION NAME: DEVELOPMENT AND EVALUATION ASSOCIATES, INC., SYRACUSE, NY.

IRIS ACCESSION NUMBER: EW004844

PUBLICATION DATE: 78

TITLE: IMPROVING THE PERFORMANCE OF WOOD IN WATERFRONT STRUCTURES.

PERSONAL AUTHOR: GRAHAM, R. D.; AND OTHERS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CONSTRUCTION (PROCESS); INSPECTION; *INSTRUCTIONAL MATERIALS; *MAINTENANCE; *OCEANOLOGY; *POST SECONDARY EDUCATION; *SEA GRANT; SLIDE TAPES; *WATERFRONT STRUCTURES; *WOOD.

DESCRIPTIVE NOTE: 77 SLIDES, 15 MINUTES.

ABSTRACT: PRESENTED ARE TECHNIQUES TO IMPROVE THE PERFORMANCE OF WOOD UNDER THE HARSH CONDITIONS OF THE MARINE ENVIRONMENT. THESE INCLUDE WOOD PRESSURE TREATED WITH PRESERVATIVES, SOUND CONSTRUCTION PRACTICES AND MATERIALS, AND REGULAR INSPECTION AND MAINTENANCE.

AVAILABILITY: FORESTRY MEDIA CENTER, OREGON STATE UNIVERSITY SCHOOL OF FORESTRY, CORVALLIS, OR 97331 (503) 754-1702. $15.00 RENTAL FEE.

IRIS ACCESSION NUMBER: EW004857

TITLE: MORE INCOME PER ACRE WITH PORTABLE SPRINKLE IRRIGATION.

DESCRIPTOR: *AGRICULTURE; AUDIOVISUAL AIDS; COSTS; DESIGN; *EQUIPMENT; FARMERS; *FARM MANAGEMENT; *FILMS; *INSTRUCTIONAL MATERIALS; *IRRIGATION (SPRINKLER); IRRIGATION SYSTEMS; PRODUCTIVITY.

DESCRIPTIVE NOTE: 16MM-28 3/4 MINUTES, COLOR, SOUND FILM.

ABSTRACT: A TRUCK FARMER, DAIRYMAN, AND TOBACCO, CORN, FRUIT AND COTTON GROWERS DISCUSS THE ADVANTAGES OF SPRINKLER IRRIGATION SYSTEMS. COSTS AND EQUIPMENT UTILIZED BY EACH ARE DETAILED.

AVAILABILITY: IRRIGATION ASSOCIATION, 13975 CONNECTICUT AVE, SILVER SPRING, VA 20906. FREE ON LOAN.

IRIS ACCESSION NUMBER: EW004862

TITLE: THE LIVING FILTER.

DESCRIPTOR: AUDIOVISUAL AIDS; *BIOLOGICAL FILTERS; EUTROPHICATION; *FILMS; HYDROLOGY; *INSTRUCTIONAL MATERIALS; IRRIGATION; *LAND APPLICATION; MANAGEMENT; MICROBIOLOGY; *NUTRIENTS; *RECYCLING (WASTEWATER); WASTE DISPOSAL; WASTES; *WASTEWATER TREATMENT.

DESCRIPTIVE NOTE: 16MM COLOR, FILM-SOUND.

ABSTRACT: DESCRIBED AND ILLUSTRATED ARE THE RESULTS OF MORE THAN 10 YEARS OF STUDY BY PENN STATE UNIVERSITY INTO THE LAND APPLICATION OF WASTEWATER. RECYCLING WASTEWATER THROUGH BIOLOGICAL FILTERS IS EMPHASIZED.

AVAILABILITY: IRRIGATION ASSOCIATION, 13975 CONNECTICUT AVE., SILVER SPRING, MD 20906. FREE ON LOAN.

IRIS ACCESSION NUMBER: EW004875

PUBLICATION DATE: DEC 78

TITLE: OPERATIONAL CHARACTERISTICS OF ANAEROBIC DIGESTERS AT SELECTED MUNICIPAL WASTEWATER TREATMENT FACILITIES IN THE UNITED STATES.

PERSONAL AUTHOR: SPENCER, R. R.; AND OTHERS.

DESCRIPTOR: *ANAEROBIC DIGESTERS; ACTIVATED CARBON; *ECONOMICS; DIGESTER GAS; *ENERGY; *FACILITIES; *MUNICIPALITIES; METHANE; *OPERATIONS (WASTEWATER); *RESEARCH; SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 36P.

ABSTRACT: ANALYSED ARE THE OPERATIONAL CHARACTERISTICS OF A REPRESENTATIVE SAMPLE OF 60 AMERICAN ANAEROBIC DIGESTERS. EXAMINED ARE GAS PRODUCTION, SOLID RESIDENCE TIME SLUDGE FLOW AND VOLATILE SOLIDS DESTRUCTION. INCLUDED IS IDENTIFICATION OF DIGESTERS OPERATING AT LESS THAN EXPECTED EFFICIENCY. THE ADDITION OF CARBON TO THESE STRESSED DIGESTERS WILL IMPROVE VOLATILE SOLIDS DESTRUCTION AND GAS PRODUCTION. THE CURRENT AND FUTURE ENERGY VALUE AND USAGE (OR NONUSAGE) IS EVALUATED. DISCUSSED IS THE DESIRABILITY OF USING AND INCREASING WASTE GAS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004876

PUBLICATION DATE: SEP 78

TITLE: VIRUSES IN WASTE, RENOVATED, AND OTHER WATERS.

PERSONAL AUTHOR: BERG, GERALD, EDITOR.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; EPIDEMICS; EFFLUENTS; INDUSTRIAL EFFLUENTS; INFECTIOUS DISEASES; *LITERATURE REVIEWS; MICROBES; *PUBLIC HEALTH; POLLUTION; RECYCLING; *RENOVATED WASTES; *SEWAGE; SLUDGE TREATMENT; UTILITIES; *VIRUSES; *WASTEWATER; *WASTES; WATER POLLUTION CONTROL; WATER QUALITY

DESCRIPTIVE NOTE: 30P.

ABSTRACT: THIS ANNOTATED BIBLIOGRAPHY COVERS MANY ASPECTS OF VIRUSES IN RELATION TO WASTE DISPOSAL AND WATER UTILIZATION. SUBJECTS INCLUDE MAN AND ANIMAL HEALTH EFFECTS, VIRAL CONCENTRATION METHODOLOGIES, CHEMICAL EFFECTS ON MICROBIAL SELF-PURIFICATION, VIRAL TRANSFER ROUTES, EVALUATION OF WATER QUALITY, VIRAL SURVIVAL AND VARIOUS DEACTIVATION METHODOLOGIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004877

PUBLICATION DATE: OCT 77

TITLE: ALTERNATIVES FOR SMALL WASTEWATER TREATMENT SYSTEMS. 3 COST/EFFECTIVENESS ANALYSIS.

DESCRIPTOR: *COST EFFECTIVENESS; CASE STUDIES; MUNICIPALITIES; *ONSITE SEWAGE TREATMENT; *ONSITE DISPOSAL; PRESSURE SEWERS; RURAL AREAS; SEWERS; SEPTIC SYSTEMS; URBAN AREAS; VACUUM SEWERS; *WASTEWATER TREATMENT; *WATER POLLUTION; *WASTEWATER DISPOSAL

DESCRIPTIVE NOTE: 31P.

ABSTRACT: PRESENTED ARE COST-EFFECTIVE ANALYSES OF

INDIVIDUAL ON-SITE SEWAGE TREATMENT-DISPOSAL AND NONCONVENTIONAL ALTERNATIVE SYSTEMS FOR SMALL COMMUNITIES. LISTED ARE ADVANTAGES, DISADVANTAGES AND PROBLEM CONDITIONS TO CONSIDER WHEN CHOOSING BETWEEN ALTERNATIVES. CONTAINS PROCEDURES FOR DETERMINING FEASIBILITY AND DESIRABILITY OF USING FOUR ON-SITE SYSTEMS AND FOUR TYPES OF COMMUNITY COLLECTION SYSTEMS. CONTAINS CASE HISTORIES WHICH INDICATE WHY AND HOW SELECTION OF NONCONVENTIONAL ALTERNATIVES OCCURRED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $6.00.

IRIS ACCESSION NUMBER: EW004879

PUBLICATION DATE: OCT 78

TITLE: PROCESS DESIGN MANUAL MUNICIPAL SLUDGE LANDFILLS.

DESCRIPTOR: CASE STUDIES; COSTS; *DESIGN; *LANDFILLS; *MUNICIPALITIES; MANAGEMENT; PLANNING; PUBLIC PARTICIPATION; *SLUDGE; SITE SELECTION; WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 289P.

ABSTRACT: THIS MANUAL CONTAINS GUIDELINES NECESSARY FOR THE PLANNING, DESIGN AND OPERATION OF A LAND FILL FOR RECEIVING MUNICIPAL WASTEWATER TREATMENT PLANT SLUDGE. GENERAL INFORMATION ON PUBLIC PARTICIPATION PROGRAMS, SITE SELECTION, MONITORING, MANAGEMENT AND COSTS IS INCLUDED. DESCRIBED AND ANALYSED ARE MAJOR ALTERNATIVE LAND FILLING METHODS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $18.00.

IRIS ACCESSION NUMBER: EW004882

PUBLICATION DATE: OCT 77

TITLE: ALTERNATIVES FOR SMALL WASTEWATER TREATMENT SYSTEMS. 1. ON-SITE DISPOSAL/SEPTAGE TREATMENT AND DISPOSAL.

DESCRIPTOR: *COST-EFFECTIVENESS; INFILTRATION; LAND APPLICATION; *ON-SITE DISPOSAL; PRESSURE SEWERS; PERCOLATION; *SEPTAGE TREATMENT; *SMALL FLOWS; *SEWERS; SOILS; *SEPTAGE DISPOSAL; SEPTIC TANKS; WATER POLLUTION CONTROL; WASTEWATER DISPOSAL; *WASTEWATER TREATMENT; WISCONSIN

DESCRIPTIVE NOTE: 91P.

ABSTRACT: DISCUSSED ARE VARIOUS ALTERNATIVE SOIL-DEPENDENT AND NONSOIL-DEPENDENT ON-SITE DISPOSAL SYSTEMS FOR SMALL WASTEWATER FLOWS. INCLUDED IS A CASE STUDY OF WISCONSIN SMALL SCALE WASTE MANAGEMENT PROJECT. EVALUATED ARE SEPTAGE AND COMBINATION SEPTAGE-SEWAGE TREATMENT AND DISPOSAL METHODS. THESE METHODS INCLUDE VARIOUS LAND DISPOSAL ALTERNATIVES, AERATED LAGOONS, ANAEROBIC-AEROBIC PROCESSING, COMPOSTING, THE PURIFAX PROCESS AND CHEMICAL TREATMENT. THE COST-EFFECTIVENESS OF VARIOUS ALTERNATIVES ARE ANALYZED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $8.00.

IRIS ACCESSION NUMBER: EW004883

PUBLICATION DATE: 79

TITLE: WATER HARDNESS AND CARDIOVASCULAR DISEASE.

DESCRIPTOR: CARDIOVASCULAR; CALCIUM; COMMUNITY HEALTH; *DISEASES; *DRINKING WATER; DISEASE CONTROL; *EPIDEMIOLOGICAL STUDIES; HEALTH EDUCATION; *LITERATURE REVIEWS; *MAGNESIUM; *PHYSIOLOGY; *PUBLIC HEALTH; POLLUTION; SODIUM; TOXICOLOGY; *WATER HARDNESS; WATER QUALITY

DESCRIPTIVE NOTE: 7P.

ABSTRACT: THIS REPORT SUMMARIZES THE PRESENT STATE OF KNOWLEDGE OF THE HEALTH EFFECTS OF WATER HARDNESS. IT DISCUSSES THE PROBLEMS DUE TO THE CURRENT LACK OF INFORMATION AND CONFLICTING RESULTS. ALTERATIONS IN CERTAIN MUNICIPAL WATER SOFTENING PRACTICES ARE RECOMMENDED, BUT A NATIONAL POLICY IS NOT FORMULATED BECAUSE RESEARCH DATA ARE INSUFFICIENT. TWO FUTURE RESEARCH PRIORITIES ARE RECOMMENDED: (1) AN INCREASE IN SPECIFIC EPIDEMIOLOGICAL STUDIES TO INVESTIGATE THE EXACT NATURE OF THE RELATIONSHIP BETWEEN WATER HARDNESS AND CARDIOVASULAR DISEASE AND (2) AN INCREASE IN CLINICAL STUDIES, INVOLVING EXAMINATION OF AUTOPSY TISSUE SAMPLES AND EXPERIMENTALLY CONTROLLED TRIALS OF INCREASING MAGNESIUM LEVELS IN HUMANS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD VA 22161. PRICE: $5.00

IRIS ACCESSION NUMBER: EW004884

PUBLICATION DATE: OCT 77

TITLE: STATUS OF OXYGEN-ACTIVATED SLUDGE WASTEWATER TREATMENT.

DESCRIPTOR: *ACTIVATED SLUDGE; AERATORS; CASE STUDIES; *DEMONSTRATION PROJECTS; DESIGN; MANAGEMENT; OPEN REACTORS; *OXYGENATION TECHNOLOGY; *OXYGEN-ACTIVATED SLUDGE; *OPERATIONS (WASTEWATER); *RESEARCH PROJECTS; *SLUDGE; *WASTEWATER TREATMENT; WASTES

DESCRIPTIVE NOTE: 46P.

ABSTRACT: PROVIDES AN UPDATED STATUS REPORT ON THE NUMBER AND TYPE OF OXYGEN-ACTIVATED SLUDGE FACILITIES IN THE OPERATION, CONSTRUCTION OR DESIGN STAGE. IT DESCRIBES IN DETAIL A RECENT E.P.A. SUPPORTED OXYGENATION RESEARCH AND DEMONSTRATION PROJECT, AN EVALUATION OF THE R.A.D. VERSION OF THE OPEN REACTOR SYSTEM BEING CARRIED OUT AT THE METROPOLITAN DENVER, COLORADO SEWAGE TREATMENT PLANT. SEVERAL ON-LINE OXYGEN WASTEWATER TREATMENT SYSTEMS ARE

SUMMARIZED AS TO THEIR DESIGN, OPERATION AND PERFORMANCE. AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD VA 22161. PRICE: $7.00.

IRIS ACCESSION NUMBER: EW004891

PUBLICATION DATE: 79

TITLE: WATER POLLUTION ECONOMICS. VOLUME 3. SEPTEMBER, 1977-AUGUST, 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; AIR POLLUTION CONTROL; *ECONOMICS; ENVIRONMENTAL IMPACT; GOVERNMENT ROLE; INDUSTRIAL WASTES; *MANAGEMENT; NATURAL RESOURCES; PLANNING; *POLLUTION; RESOURCE MANAGEMENT; TOXIC SUBSTANCES; URBAN PLANNING; *WATER POLLUTION CONTROL; WATER QUALITY; WASTEWATER.

DESCRIPTIVE NOTE: 280P.

ABSTRACT: THIS BIBLIOGRAPHY CITES REPORTS THAT CONSIDER THE ECONOMICS OF WATER POLLUTION CONTROL AND MANAGEMENT. THE CITATIONS COVER THE ECONOMICS INVOLVED WITH INDUSTRIAL CLEAN UP, GOVERNMENT PLANNING, RESOURCE MANAGEMENT, AND URBAN PLANNING. THEY EXCLUDE ECONOMIC IMPACTS OF POLLUTION AND ITS CONTROL IN SPECIFIC INDUSTRIES, REGIONS, AND THE ECONOMY AS A WHOLE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00.

IRIS ACCESSION NUMBER: EW004895

PUBLICATION DATE: 79

TITLE: WATER RIGHTS AND WATER LAW VOLUME 2. 1974-JULY, 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; CONSERVATION; DROUGHTS; DRAINAGE; FEDERAL GOVERNMENT; FLOODS; GROUND WATER; GOVERNMENT ROLE; IRRIGATION; *LEGISLATION; LAND USE; MANAGEMENT; PESTICIDES; SURFACE WATERS; SEWAGE DISPOSAL; STANDARDS; STATE GOVERNMENT; UTILITIES; *WATER RESOURCES; *WATER RIGHTS; *WATER LAW; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 314P.

ABSTRACT: REPORTED ARE LEGAL ASPECTS OF INTERSTATE AND INTRASTATE WATER RIGHTS, WATER QUALITY, AND WATER MANAGEMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00

IRIS ACCESSION NUMBER: EW004896
PUBLICATION DATE: 77

TITLE: PHOSPHORUS REMOVAL IN SEWAGE TREATMENT VOLUME 1.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; AERATION PONDS; EUTROPHICATION; LAND DISPOSAL; OXYGENATION; *PHOSPHORUS; *PRECIPITATION; *SEWERS; MICROBIOLOGY; SYSTEM DESIGNS; *TERTIARY SEWAGE TREATMENT; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 189P.

ABSTRACT: REPORTED IS RESEARCH ON THE REMOVAL OF PHOSPHORUS IN SEWAGE TREATMENT SYSTEMS. THE CITATIONS COVER SEWAGE MICROBIOLOGY, PRECIPITATION, TERTIARY SEWAGE TECHNIQUES, SYSTEM DESIGNS, OXYGENATION, AND COMBINED INDUSTRIAL-SEWAGE PROCESSES. LAND DISPOSAL METHODS ARE ALSO CITED IF THEY DISCUSS THE FATE OF THE PHOSPHORUS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00.

IRIS ACCESSION NUMBER: EW004897

PUBLICATION DATE: 79

TITLE: PHOSPHORUS REMOVAL IN SEWAGE TREATMENT SYSTEMS VOLUME 2. 1977-AUGUST, 1979.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; AERATION PONDS; EUTROPHICATION; ECOSYSTEMS; INDUSTRIAL PROCESSES; *LAND DISPOSAL; OXYGENATION; *PHOSPHORUS; *SEWAGE MICROBIOLOGY; SYSTEM DESIGNS; *TERTIARY WASTEWATER TREATMENT; WASTEWATER; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 110P.

ABSTRACT: RESEARCH REPORTS ON THE REMOVAL OF PHOSPHORUS IN SEWAGE TREATMENT SYSTEMS ARE CITED. THE CITATIONS COVER SEWAGE MICROBIOLOGY, PRECIPITATION, TERTIARY SEWAGE TECHNIQUES, SYSTEM DESIGNS, OXYGENATION, AND COMBINED INDUSTRIAL-SEWAGE PROCESSES. LAND DISPOSAL METHODS RELATING TO PHOSPHORUS ARE INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $30.00.

IRIS ACCESSION NUMBER: EW004899

TITLE: MECHANICAL MAINTENANCE TRAINING PROGRAM #5-CENTRIFUGAL PUMPS.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CENTRIFUGAL PUMPS; *EQUIPMENT; *INSTRUCTIONAL MATERIALS; *INSPECTION; JOB SKILLS; *MAINTENANCE; *PUMPS; *PARAPROFESSIONAL PERSONNEL; *TRAINING PROGRAMS; VIDEOTAPE CASSETTES; VOCATIONAL EDUCATION; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: VC,5 OVERHEADS, MANUAL-THIS MODULE CAN BE BORROWED FOR A TWO WEEK PERIOD FREE OF CHARGE.

ABSTRACT: DETAILED IN THESE FOUR VIDEOCASSETTES, ONE OF FIVE MODULES OF A MAINTENANCE TRAINING PROGRAM FOR WATER AND WASTEWATER TREATMENT PERSONNEL, ARE THE COMPLETE DIASSEMBLY WITH ROTOR REMOVAL; CASING, SEAL, AND BEARING PARTS INSPECTION; AND OIL CLEARANCE MEASUREMENT AND REINSTALLATION OF ALL PARTS COMMON TO CENTRIFUGAL PUMPS. THIS MODULE CONSISTS OF 3/4 INCH U-MATIC COLOR VIDEO-CASSETTES, A STUDENT WORKBOOK, TRANSPARENCIES, AND AN INSTRUCTORS GUIDE.

AVAILABILITY: USEPA, NATIONAL TRAINING AND OPERATIONAL TECHNOLOGY CENTER, CINCINNATI, OH 45268. ATTENTION: MRS. EILEEN HOPEWELL (513) 684-7503.

IRIS ACCESSION NUMBER: EW004900

PUBLICATION DATE: AUG 79

TITLE: PROCEEDINGS OF A WORKSHOP ON ALTERNATIVE WASTEWATER TREATMENT SYSTEMS.

PERSONAL AUTHOR: STOUT, GLENN E.; AND OTHERS.

DESCRIPTOR: *ALTERNATIVE TREATMENT SYSTEMS; *COST EFFECTIVENESS; CLEAN WATER ACT; *DESIGN; ENGINEERING; *FACILITIES; FEDERAL LEGISLATION; LAND APPLICATION; MANAGEMENT; ON-SITE MANAGEMENT; *ON-SITE TREATMENT; *POLICY; PRESSURE SEWERS; PUBLIC PARTICIPATION; PUBLIC HEALTH; *REGULATIONS; STATE LEGISLATION; SLUDGE; SEWAGE; SEWERS; *WASTEWATER TREATMENT; WASTE DISPOSAL

DESCRIPTIVE NOTE: 145P.

ABSTRACT: THIS IS THE PROCEEDINGS OF A WORKSHOP HELD TO INSTRICT CONSULTANTS, LOCAL OFFICIALS, AND STATE AGENCY PERSONNEL IN THE STATE-OF-THE-ART OF ALTERNATIVE WASTEWATER TREATMENT SYSTEMS. THE WORKSHOP CONSISTED OF PRESENTATIONS BY SPEAKERS FROM GOVERNMENTAL AGENCIES, UNIVERSITIES, AND CONSULTING FIRMS ON THE DESIGN OF ALTERNATIVE SYSTEMS, COST EFFECTIVENESS, AND ON THE STATUS OF FEDERAL LAWS. THE WORKSHOP COVERED THREE MAIN AREAS; (1) POLICY AND REGULATIONS; (2) ALTERNATIVE AND INNOVATIVE SYSTEMS; AND (3) INSTITUTIONAL ASPECTS.

AVAILABILITY: UNIVERSITY OF ILLINOIS, WATER RESOURCES CENTER, 2535 HYDROSYSTEMS LABORATORY, URBANA, IL 61801. PRICE: $5.00.

IRIS ACCESSION NUMBER: EW004901

PUBLICATION DATE: OCT 79

TITLE: THE DETERMINATION OF CYANIDE ION IN NATURAL WATERS WITH A SELECTIVE ION ELECTRODE.

PERSONAL AUTHOR: RANDS, D. G.; BAIN, R. L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CYANIDE; *CHEMISTRY; *COMPLEXING AGENTS; *CHEMICAL ANALYSIS; *LABORATORY TECHNIQUES; MEASUREMENT; *SELECTIVE ION ELECTRODE; *WATER RESOURCES.

DESCRIPTIVE NOTE: 20P.

ABSTRACT: REPORTED IS AN INVESTIGATION TO SECURE THE RELEASE OF CYANIDE IONS IN WATER AND USE A SELECTIVE ION ELECTRODE FOR DIRECT MEASUREMENT OF ION CONCENTRATION. THE PROPOSED TECHNIQUE IS BASED UPON THE ADDITION OF AN ORGANIC LIGAND TO THE SAMPLE WHICH WILL FORM A METAL COMPLEX SUFFICIENTLY STABLE TO RELEASE A QUANTITATIVE AMOUNT OF CYANIDE FROM METAL-CYANO COMPLEXES. THE INVESTIGATED COMPLEXING AGENTS RESULTED IN A STATE OF EQUILIBRIUM BETWEEN THE COMPLEXED LIGAND AND THE CYANIDE. THE COMPLEXING AGENTS, THEREFORE, DO NOT FORM METAL COMPLEXES SUFFICIENTLY STABLE TO FREE ENOUGH CYANIDE ION TO PERMIT AN ANALYSIS FOR THE TOTAL CYANIDE ION CONCENTRATION.

AVAILABILITY: UNIVERSITY OF ILLINOIS, WATER RESOURCES CENTER, 2535 HYDROSYSTEMS LABORATORY, URBANA, IL 61801. PRICE: $4.50.

IRIS ACCESSION NUMBER: EW004903

PUBLICATION DATE: MAY 80

TITLE: WORKBOOK EXAMPLE ILLUSTRATES ELECTRICAL SAVINGS.

PERSONAL AUTHOR: BRAILEY, DONALD; JACOBS, ALLAN

DESCRIPTOR: ENERGY AUDITS; *ENERGY CONSERVATION; ENERGY; ELECTRICITY; *FACILITIES; *MANAGEMENT; REGULATIONS; RETROFITTING; UTILITIES; *WATER TREATMENT

DESCRIPTIVE NOTE: 46-47, 68, 74P.

ABSTRACT: THIS ARTICLE DESCRIBES HOW THE NATIONAL ENERGY CONSERVATION ACT IN 1977 SIGNIFICANTLY AFFECTED ENERGY MANAGEMENT. APPROPRIATIONS UNDER THIS LEGISLATION PROVIDE FUNDS FOR ENERGY AUDITING AND RETROFITTING IN PUBLIC BUILDINGS. DESCRIBES A TYPICAL MUNICIPAL WATER WORKS ENERGY USAGE AND BUDGET. EVALUATES THE POTENTIAL TO DECREASE ENERGY REQUIREMENTS BY AN ELECTRIC BILL. PROPOSES ENERGY CONSERVATION MODIFICATIONS BY ALTERING THE DEMAND CHARGE, POWER FACTER, BASIC ENERGY CHARGE OR TIME OF DAY CHARGE. INCLUDES CONSERVATION RECOMMENDATIONS ON THE CHEMICAL USAGE OF THE PLANT IN THE ALUM RECOVERY AND COAGULATION CONTROL PROCESSES.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N5.

IRIS ACCESSION NUMBER: EW004904

PUBLICATION DATE: MAY 80

TITLE: ESTIMATING THE UNACCOUNTED-FOR WATER IN A DISTRIBUTION SYSTEM.

DESCRIPTOR: *ACCOUNTING; *ECONOMICS; *MEASURMENT; *RECORDS;

UTILITIES; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 52-54, 72.

ABSTRACT: THE ARTICLE DESCRIBES A METHODOLOGY USING WATER CONSUMPTION WEIGHTED AVERAGES TO DETERMINE METERED MONTHLY WATER CONSUMPTION. PRESENTLY THE SUM OF ALL THE BILLED FOR WATER IN A MONTH REPRESENTS NEITHER THE ACTUAL USAGE NOR THE ACCOUNTED FOR WATER IN A MONTH. THE DIFFERENCE BETWEEN THE AMOUNT OF WATER PUMPED TO THE DISTRIBUTION SYSTEM AND THE AMOUNT OF BILLED FOR WATER, THEREFORE, IS NOT THE UNACCOUNTED FOR WATER FOR THE MONTH. THE PROPOSED METHODOLOGY WILL PERMIT A MORE ACCURAGE ASSESSMENT OF ACCOUNTED FOR WATER AND, HENCE, THE CORRESPONDING UNACCOUNTED WATER LOSS CAN BE MORE ACCURATELY ASSESSED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N5.

IRIS ACCESSION NUMBER: EW004905

PUBLICATION DATE: MAY 80

TITLE: LOW-COST, LOW-ENERGY WASTEWATER TREATMENT GETTING NOTICE.

PERSONAL AUTHOR: GREENLUND, TRACY W.

DESCRIPTOR: AERATION; *BIOLOGICAL LOADING; *COST EFFECTIVENESS; *DESIGN; ENGINEERING; *ENERGY CONSERVATION; *FACILITIES; HYDRAULICS; MAINTENANCE; MANAGEMENT; *OPERATIONS (WASTEWATER); SANITATION; SLUDGE; UTILITIES; WASTES; *WASTE DISPOSAL; *WATER RESOURCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 56, 75P.

ABSTRACT: THIS ARTICLE DESCRIBES LOW BUDGET, ENERGY CONSERVATION WASTEWATER TREATMENT PROCESSES IN NETHERLANDS AND WEST GERMANY. THE NORTH AMERICAN AND EUROPEAN PLANT DESIGN THEORY'S ARE CONTRASTED. IN EUROPE, THE BIOLOGICAL LOADING OF A SYSTEM IS CONSIDERED TO BE OF PRIMARY IMPORTANCE, WITH HYDRAULICS AS A SECONDARY CONCERN. IN THE UNITED STATES THE SITUATION IS COMPLETELY REVERSED. CONTAINS A DISCUSSION OF THE EUROPEAN LOW LOAD AERATION AND OXYGEN TRANSFER SYSTEMS.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N5.

IRIS ACCESSION NUMBER: EW004906

PUBLICATION DATE: MAY 80

TITLE: WATER/WASTEWATER PROCESS CONTROL INSTRUMENTATION--PHYSICAL PARAMETERS AND THEIR MEASUREMENT.

PERSONAL AUTHOR: BABVOCK, RUSSELL H.

DESCRIPTOR: *FACILITIES; *INSTRUMENTATION; *MEASUREMENT; *MEASUREMENT TECHNIQUES; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *PRESSURE; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 60P.

ABSTRACT: THE MEASUREMENT OF PHYSICAL PARAMETERS IS ESSENTIAL TO THE CONTROL OF WATER AND WASTEWATER FACILITIES PROCESSING. THE EVALUATION OF INSTRUMENTS FOR MEASURING PRESSURE IS EMPHASIZED. DESCRIBES THE DIRECT CLASSICAL MECHANICAL MEASUREMENT METHODS, INCLUDING THE BOURDON GAGE AND DIFFERENTIAL PRESSURE GAGES. INCLUDES DESCRIPTIONS OF THE NULL-BALANCE MEASUREMENT CONCEPT AND THE BEAM-BALANCE.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N5.

IRIS ACCESSION NUMBER: EW004907

PUBLICATION DATE: MAY 80

TITLE: WHICH MEASURING INSTRUMENT SHOULD YOU BUY?

DESCRIPTOR: *EVALUATION; *FLOW; *INSTRUMENTATION; *MEASUREMENT; *MEASUREMENT TECHNIQUES; *OPERATIONS (WASTEWATER); *PRESSURE; *TEMPERATURE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 61-62, 76P.

ABSTRACT: THIS ARTICLE DISCUSSES INSTRUMENT SELECTION, WITH CONSIDERATION GIVEN TO THE LOCATION OF THE READINGS AND THE DEVICE'S CALIBRATION OVER IT'S FUTURE LIFE SPAN. DISCUSSED ARE QUESTIONS WHICH SHOULD BE ADDRESSED WHEN SELECTING INSTRUMENTS TO MEASURE FLOW PRESSURE, DIFFERENTIAL PRESSURE AND TEMPERATURE. ADVICE IS GIVEN ON THE SUITABILITY OF VARIOUS MECHANICAL AND MAGNETIC INSTRUMENTS UNDER SELECTED CONDITIONS. METHODS FOR ASSESSING LEVEL AND FLOW ARE ALSO DISCUSSED.

AVAILABILITY: WATER AND SEWAGE WORKS; V127 N5.

IRIS ACCESSION NUMBER: EW004909

PUBLICATION DATE: JUL 77

TITLE: POLLUTION ABATEMENT IN THE FRUIT AND VEGETABLE INDUSTRY. THREE VOLUMES. (1) BASICS OF POLLUTION CONTROL/CASE HISTORIES, (2) IN-PLANT CONTROL OF PROCESS WASTEWATER AND (3) WASTEWATER TREATMENT.

DESCRIPTOR: *AGRICULTURE; BIOCHEMICAL OXYGEN DEMAND; BOD; *CASE STUDIES; DISINFECTION; *FOOD PROCESSING; *FRUITS; *INDUSTRY; *LAND APPLICATION; MANAGEMENT; *POLLUTION ABATEMENT; POLLUTION CONTROL; PERMITS; RECYCLING; SOLID WASTES; SLUDGE; TREATMENT SCHEMES; *VEGETABLES; *WASTEWATER TREATMENT; WATER QUALITY; *WATER POLLUTION CONTROL; WATER CONSERVATION.

DESCRIPTIVE NOTE: 300P.

ABSTRACT: THE FIRST VOLUME EXPLAINS THE BASICS OF POLLUTION CONTROL AND VEGETABLE INDUSTRY. VOLUME TWO DISCUSSES IN-

PLANT CONTROL OF PROCESS WASTEWATER ENCOMPASSING ANALYSIS OF PLANT PROCESSES, FACTORS INFLUENCING WASTE GENERATION, AND IN-PLANT MODIFICATIONS AND EFFECTS. VOLUME THREE OFFERS A GENERAL UNDERSTANDING OF WASTEWATER TREATMENT TECHNOLOGY THAT WILL ENABLE FRUIT AND VEGETABLE PROCESSORS TO DEAL MORE EFFECTIVELY WITH REGULATORY AGENCIES AND THEIR OWN WASTE DISPOSAL SITUATIONS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $18.50 FOR ALL THREE VOLUMES.

IRIS ACCESSION NUMBER: EW004912

PUBLICATION DATE: OCT 78

TITLE: ENVIRONMENTAL POLLUTION CONTROL TEXTILE PROCESSING INDUSTRY.

DESCRIPTOR: *AIR POLLUTION; *CASE STUDIES; *DESIGN; *ENGINEERING; EQUIPMENT; FACILITIES; *INDUSTRY; *PLANNING; PILOT PLANTS; SOLID WASTES; STATE-OF-THE-ART REVIEW; *TEXTILE INDUSTRY; *WASTEWATER TREATMENT; *WATER POLLUTION; WATER QUALITY

DESCRIPTIVE NOTE: 401P.

ABSTRACT: THIS MANUAL CONTAINS INFORMATION RELATING TO THE DESIGN OF AIR, WATER AND SOLIDS POLLUTION ABATEMENT SYSTEMS FOR THE TEXTILE INDUSTRY. IT IS INTENDED FOR USE BY PROCESS DESIGN ENGINEERS, CONSULTANTS, AND ENGINEERING COMPANIES ACTIVE IN THE DESIGN OR UPGRADING OF TEXTILE WASTE TREATMENT FACILITIES. THE MANUAL OUTLINES TYPICAL OPERATIONS USED IN THE MANUFACTURE OF VARIOUS TYPES OF FABRICS AS WELL AS SOURCES AND STRENGTHS OF WASTEWATER, AIR POLLUTANTS AND SOLID WASTE. DESIGN INFORMATION RELATIVE TO POLLUTION ABATEMENT INCLUDES IN-PLANT CONTROL MEASURES, EQUIPMENT SELECTION FACTORS AND EMERGING TECHNOLOGY. WATER POLLUTION CONTROL IN THE TEXTILE INDUSTRY IS THE MAJOR SUBJECT COVERED IN THIS MANUAL. PORTIONS OF THE MANUAL INCLUDE COMPREHENSIVE DESCRIPTIONS AND ANALYSES OF THE VARIOUS WASTEWATER SOURCES AND PROVIDE THE BASIC DATA FOR FACILITY DESIGN. IN-PLANT CONTROLS ARE DESCRIBED FOR REDUCING THE QUANTITY AND/OR STRENGTH OF THE WASTEWATER, AND WASTE TREATMENT DESIGNS ARE DEFINED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, OPERATIONS DIVISION, SPRINGFIELD, VA 22161. PRICE: $25.00.

IRIS ACCESSION NUMBER: EW004926

PUBLICATION DATE: APR 80

TITLE: EFFECTS OF WATER CONSERVATION ON MUNICIPAL WASTEWATER TREATMENT FACILITIES.

PERSONAL AUTHOR: DAVIS, JOHN A.; BURSZTYNSKY, TARAS A.

DESCRIPTOR: AIR POLLUTION CONTROL; *CONSERVATION; ECONOMICS; *FACILITIES; LAND USE; MANAGEMENT; *MUNICIPALITIES; POLLUTION; PLANNING; POPULATION GROWTH; RECYCLING; SAN FRANCISCO; SOLID WASTES; UTILITIES; *WASTE DISPOSAL; WATER POLLUTION; WATER POLLUTION CONTROL; *WATER RESOURCES

DESCRIPTIVE NOTE: 730-739P.

ABSTRACT: THE ARTICLE DISCUSSES THE WATER SUPPLY ELEMENT OF THE RECENTLY COMPLETED INTEGRATED ENVIRONMENTAL MANAGEMENT PLAN FOR SAN FRANCISCO BAY AREA. THE PLAN RECOMMENDS A MIX OF WASTEWATER RECLAMATION, WATER SAVING, AND DEVELOPMENT OF NEW WATER SOURCES. THE PLAN'S EFFECTS ON MUNICIPAL WASTEWATER TREATMENT FACILITIES ARE ANALYZED IN DETAIL.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V52 N4.

IRIS ACCESSION NUMBER: EW004927

PUBLICATION DATE: APR 80

TITLE: SOLIDS HANDLING SYSTEMS FOR SIX DIFFERENT DISPOSAL OPTIONS.

PERSONAL AUTHOR: RIMKUS, RAYMOND R.; AND OTHERS.

DESCRIPTOR: CONSERVATION; *COST EFFECTIVENESS; FERTILIZERS; LAGOONS; *LAND USE; *MUNICIPALITIES; *MANAGEMENT; POLLUTION; REGULATIONS; *RECYCLING; *SANITATION; *SLUDGE; SEWAGE; *SOLID WASTES; URBAN ENVIPONMENT; UTILITIES; *WASTEWATER TREATMENT; *WASTE DISPOSAL; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 740-749P.

ABSTRACT: DESCRIBES THE POLICY OF THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO FOR WASTEWATER SOLIDS UTILIZATION. THE PRACTICAL AND ECONOMIC ASPECTS OF SIX MANAGEMENT DISPOSAL OPTIONS ARE CONTRASTED AND COMPARED. ALSO INCLUDES A BRIEF DESCRIPTION OF THE POSSIBLE EFFECTS OF THE ENVIRONMENTAL PROTECTION AGENCYS PROPOSED REGULATIONS ON THE UTILIZATION OF MUNICIPAL SLUDGE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V52 N4.

IRIS ACCESSION NUMBER: EW004928

PUBLICATION DATE: APR 80

TITLE: COST OF WATER RECLAMATION BY ADVANCED WASTEWATER TREATMENT.

PERSONAL AUTHOR: ARGO, DAVID G.

DESCRIPTOR: *CALIFORNIA; *CONSTRUCTION; DESIGN; *ECONOMICS; ENGINEERING; MAINTENANCE; MUNICIPALITIES; POLLUTION; *RECYCLING; SLUDGE; UTILITIES; *WASTEWATER TREATMENT; *WASTE DISPOSAL; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 750-759P.

ABSTRACT: PRESENTED ARE DETAILED COST DATA OBTAINED FROM THE FIRST YEARS OF OPERATING THE COUNTRY'S LARGEST ADVANCED WASTEWATER TREATMENT FACILITIES IN CALIFORNIA. THE REPORT ALSO COMPARES THE COST OF PRODUCING RECLAIMED WATER WITH THE COST OF IMPORTANT WATER SUPPLIES AVAILABLE IN SOUTHERN CALIFORNIA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V52 N4.

IRIS ACCESSION NUMBER: EW004929

PUBLICATION DATE: APR 80

TITLE: SOLIDS SEPARATION IN ACTIVATED SLUDGE SYSTEM DESIGN AND OPERATION.

PERSONAL AUTHOR: BUSCH, A. W.; IRVINE, R. L.

DESCRIPTOR: *ACTIVATED SLUDGE; COST EFFECTIVENESS; *DESIGN; *EFFLUENTS; *FACILITIES; FILTRATION; LEGISLATION; *OPERATIONS (WASTEWATER); POLLUTION; PERMITS; RECYCLING; *STANDARDS; SLUDGE; TECHNOLOGY; *WASTEWATER TREATMENT; *WASTES DISPOSAL; WASTES; *WATER RESOURCES

DESCRIPTIVE NOTE: 804-809P.

ABSTRACT: ACTIVATED SLUDGE TREATMENT IS A WIDELY USED PROCESS FOR REMOVAL OF DISSOLVED ORGANIC SUBSTANCES FROM WASTEWATER. THE TREATMENT IS CONSIDERED ON THE BASIS OF NEW STANDARDS THAT WILL DECREASE THE ACCEPTABLE SUSPENDED SOLID CONCENTRATION IN EFFLUENT. TWO SOLUTIONS EMPHASIZING BIOLOGICAL PROCESS PERFORMANCE AND WHICH WILL PRODUCE ACCEPTABLE EFFLUENT ARE PRESENTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V52 N4.

IRIS ACCESSION NUMBER: EW004930

PUBLICATION DATE: APR 80

TITLE: COMPARISON OF CHLORINE DIOXIDE AND CHLORINE IN WASTEWATER DISINFECTION.

PERSONAL AUTHOR: AIETA, E. MARCO; AND OTHERS.

DESCRIPTOR: *CHLORINE; *CHLORINE DIOXIDE; *COST EFFECTIVENESS; *DISINFECTION; *ECONOMICS; *FACILITIES; MODELS; MUNICIPALITIES; *OPERATIONS (WASTEWATER); POLLUTION; PUBLIC HEALTH; RECYCLING; *RESEARCH; *WASTEWATER TREATMENT; WASTES; *WASTE DISPOSAL; *WATER RESOURCES; WATER POLLUTION CONTROL.

DESCRIPTIVE NOTE: 810-822P.

ABSTRACT: PRESENTS THE RESULTS OF EXPERIMENTAL RESEARCH COMPARING CHLORIDE DIOXIDE WITH CHLORINE IN WASTEWATER DISINFECTION. EXPERIMENTS IDENTIFIED THE FACTORS INFLUENCING BACTERICIDAL EFFECTIVENESS OF CHLORINE DIOXIDE AND COMPARED THE VIRICIDAL EFFECTIVENESS OF THE TWO DISINFECTING AGENTS. A MODEL WAS FORMULATED TO DESIGN CHLORINE DIOXIDE DISINFECTION FACILITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V52 N4.

IRIS ACCESSION NUMBER: EW004931

PUBLICATION DATE: 78

TITLE: PLANNING A CONFERENCE.

DESCRIPTOR: *CONFERENCES; CITIZEN FORUMS; ENVIRONMENTAL ISSUES; EVALUATION; FINANCES; *FORUMS; GRANTS; GOVERNMENTAL AGENCIES; GOALS; *PLANNING; PUBLICITY; SCHEDULING

DESCRIPTIVE NOTE: 22P.

ABSTRACT: THIS GUIDE IS A RESULT OF CONSIDERABLE EXPERIENCE IN PLANNING ONE-DAY AND HALF-DAY CONFERENCES. THE PAMPHLET DESCRIBES A RANGE OF POSSIBILITIES AND DISCUSSES THE ADVANTAGES AND DISADVANTAGES OF EACH. AN OUTLINE IS GIVEN OF THE NECESSARY STEPS INVOLVED IN PLANNING AND ORGANIZATION FROM GRANT APPLICATION TO CONFERENCE EVALUATION. ALSO INCLUDED ARE SEVERAL CHECKLISTS, ADVICE ON SELECTING SPEAKERS AND METHODS OF INVOLVING PROGRAM AND PUBLICITY COMMITTEES.

AVAILABILITY: LEAGUE OF WOMEN VOTERS OF CALIFORNIA, ENVIRONMENTAL PROTECTION AGENCY, CALIFORNIA. FREE OF CHARGE.

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                                        EW004647  EW004668

 ENVIRONMENTAL INFLUENCES               (38)      EW004366  EW004367  EW004368  EW004369  EW004376  EW004392  EW004410
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 ENVIRONMENTAL ISSUES                   (1)       EW004931

*ENVIRONMENTAL PROTECTION AGENCY        (3)       EW004493  EW004565  EW004599

*ENVIRONMENTAL RESEARCH                 (18)      EW004307  EW004322  EW004325  EW004329  EW004330  EW004349  EW004406
                                        EW004407  EW004416  EW004417  EW004418  EW004419  EW004420  EW004421  EW004424
                                        EW004425  EW004427  EW004750

 ENVIRONMENTAL RESEARCH                 (2)       EW004326  EW004426

*ENVIRONMENTAL SCIENCES                 (1)       EW004426

*ENVIRONMENTAL TECHNICIAN               (10)      EW004824  EW004825  EW004826  EW004827  EW004828  EW004829  EW004830
                                        EW004831  EW004833  EW004834

 ENVIRONMENTAL TECHNICIAN               (1)       EW004832

*ENVIRONMENTAL TECHNICIANS              (3)       EW004457  EW004610  EW004835

 EPA                                    (1)       EW004455

 EPA REGION X                           (1)       EW004310

 EPIDEMICS                              (1)       EW004876

*EPIDEMIOLOGICAL STUDIES                (1)       EW004883

 EPIDEMIOLOGY                           (1)       EW004538

*EQUIPMENT                              (19)      EW001393  EW001395  EW004355  EW004376  EW004409  EW004429  EW004434
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*EQUIPMENT SELECTION (1) EW004494

*EQUIPMENT UTILIZATION (1) EW004353

*EROSION (10) EW004303 EW004304 EW004306 EW004311 EW004314 EW004328 EW004333 EW004335 EW004478 EW004815

EROSION (12) EW004307 EW004310 EW004312 EW004316 EW004325 EW004326 EW004329 EW004477 EW004488 EW004489 EW004601 EW004661

*EROSION CONTROL (8) EW004332 EW004389 EW004479 EW004483 EW004487 EW004491 EW004492 EW004592

EROSION CONTROL (7) EW004331 EW004383 EW004400 EW004481 EW004484 EW004485 EW004486

EROSION PREVENTION (1) EW004812

ESTUARIES (2) EW004522 EW004657

*ETHYLBENZENE (1) EW004620

*EUROPE (5) EW004365 EW004438 EW004439 EW004440 EW004441

*EUTROPHICATION (1) EW004801

EUTROPHICATION (7) EW004523 EW004547 EW004548 EW004788 EW004862 EW004896 EW004897

*EVALUATION (10) EW004466 EW004475 EW004477 EW004578 EW004581 EW004644 EW004723 EW004729 EW004748 EW004907

EVALUATION (5) EW004647 EW004659 EW004699 EW004725 EW004931

*EVALUATION METHODS (4) EW004377 EW004385 EW004392 EW004495

EVALUATION METHODS (7) EW004387 EW004388 EW004393 EW004526 EW004550 EW004736 EW004817

*FABRICS (1) EW004481

*FACILITIES (36) EW001253 EW001393 EW001394 EW001395 EW004358 EW004365 EW004401 EW004402 EW004429 EW004449 EW004540 EW004544 EW004549 EW004565 EW004599 EW004672 EW004676 EW004695 EW004696 EW004698 EW004699 EW004703 EW004727 EW004748 EW004768 EW004789 EW004808 EW004823 EW004875 EW004900 EW004903 EW004905 EW004906 EW004926 EW004929 EW004930

FACILITIES (13) EW004335 EW004359 EW004542 EW004545 EW004582 EW004697 EW004702 EW004724 EW004725 EW004728 EW004747 EW004798 EW004912

*FACILITY GUIDELINES (3) EW004449 EW004493 EW004833

FACILITY GUIDELINES (4) EW004430 EW004452 EW004455 EW004458

FARMERS (1) EW004857

*FARM MANAGEMENT (1) EW004857

*FEASIBILITY STUDIES (1) EW004583

FEDERAL AID (1) EW004802

*FEDERAL GOVERNMENT (14) EW004567 EW004591 EW004611 EW004612 EW004613 EW004614 EW004615 EW004616 EW004617 EW004618 EW004619 EW004620 EW004621 EW004623

FEDERAL GOVERNMENT (9) EW004472 EW004589 EW004622 EW004655 EW004656 EW004693 EW004761 EW004812 EW004895

*FEDERAL LEGISLATION (1) EW004326

FEDERAL LEGISLATION (2) EW004809 EW004900

*FEDERAL PROGRAMS (2) EW004591 EW004599

FEDERAL PROGRAMS (1) EW004788

*FEDERAL ROLE (1) EW004565

FERTILIZERS (4) EW004309 EW004326 EW004815 EW004927

*FIELD STUDIES (1) EW004373

FIELD STUDIES (2) EW004522 EW004610

*FILMS (15) EW004571 EW004572 EW004573 EW004574 EW004654 EW004779 EW004780 EW004781 EW004782 EW004783 EW004784 EW004785 EW004812 EW004857 EW004862

FILMS (1) EW002297

*FILTERS (2) EW004376 EW004582

*FILTRATION (10) EW004376 EW004441 EW004451 EW004509 EW004695 EW004696 EW004697 EW004698 EW004699 EW004703

FILTRATION (2) EW000493 EW004929

FINANCES (1) EW004931

*FIRE PREVENTION (1) EW004351

*FISH (1) EW004436

FISH (2) EW004361 EW004372

FISHERIES (2) EW004349 EW004498

*FLOCCULANTS (1) EW004454

*FLOOD CONTROL (1) EW004812

*FLOODS (1) EW004366

FLOODS (3) EW004556 EW004767 EW004895

*FLORIDA (LAKELAND) (1) EW004747

*FLOW (1) EW004907

*FLOW CONTROL (1) EW004766

*FLOW MEASUREMENT (2) EW002759 EW004814

FLOW MEASUREMENT (1) EW004396

*FLOW METERS (1) EW002759
*FLUID MECHANICS (1) EW004657
FLUORIDATION (2) EW000493 EW004829
*FOOD (1) EW004498
*FOOD PROCESSING (1) EW004909
FOOD STANDARDS (1) EW004498
FORECASTING (1) EW004768
*FOREST DAMAGE (1) EW004478
FOREST RESIDUES (1) EW004348
*FORESTRY (24) EW004304 EW004305 EW004306 EW004309 EW004310 EW004311 EW004312
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*FORUMS (1) EW004931
FREQUENCY ANALYSIS (1) EW004386
*FROZEN PIPES (1) EW004541
*FRUITS (1) EW004909
FUEL CONSUMPTION (1) EW004769
FUELS (1) EW004747
*GAS-LIQUID DISSOLUTION. (1) EW004728
GENETICS (1) EW004514
GEOGRAPHY (2) EW004357 EW004807
*GEOLOGY (1) EW004328
GEOLOGY (2) EW004398 EW004399
GEOMETRIC CONCEPTS (1) EW004346
*GEORGIA (2) EW004692 EW004767
GEORGIA (1) EW004325
*GLOBAL APPROACH (3) EW004524 EW004525 EW004771
GLOBAL APPROACH (2) EW004394 EW004500
GLOSSARIES (1) EW004797
GOALS (1) EW004931

GOVERNEMNT AGENCIES	(1)	EW004533
GOVERNMENTAL AGENCIES	(1)	EW004931
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GOVERNMENT ROLE	(14)	EW001397 EW004333 EW004500 EW004556 EW004575 EW004591 EW004641 EW004692 EW004693 EW004787 EW004809 EW004812 EW004891 EW004895
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GRANTS	(1)	EW004931
*GRANULAR ACTIVATED CARBON	(1)	EW004725
*GRANULAR ACTIVATED CARBON (GAC)	(2)	EW004581 EW004582
GRAPHIC ARTS	(1)	EW004346
GRASSES	(1)	EW004492
*GRAZING	(1)	EW004349
GREASE	(1)	EW004816
*GREAT LAKES	(7)	EW004461 EW004527 EW004529 EW004530 EW004592 EW004644 EW004652
*GROUNDWATER	(8)	EW004350 EW004394 EW004399 EW004443 EW004444 EW004504 EW004763 EW004779
GROUND WATER	(2)	EW004835 EW004895
GROUNDWATER	(1)	EW004652
*GROUTS (SEWER)	(1)	EW004537
*GUIDELINES	(27)	EW004303 EW004309 EW004314 EW004331 EW004332 EW004333 EW004335 EW004410 EW004479 EW004481 EW004483 EW004485 EW004486 EW004487 EW004488 EW004489 EW004492 EW004494 EW004506 EW004538 EW004539 EW004592 EW004621 EW004662 EW004668 EW004790 EW004822
GUIDELINES	(17)	EW004311 EW004326 EW004351 EW004369 EW004547 EW004611 EW004612 EW004613 EW004614 EW004615 EW004616 EW004617 EW004618 EW004619 EW004620 EW004622 EW004623
*HANDBOOKS	(2)	EW004502 EW004516
HARDWOODS	(1)	EW004307
*HAZARD ASSESSMENT	(1)	EW004373
*HAZARDOUS MATERIALS	(5)	EW004375 EW004412 EW004564 EW004566 EW004697
*HAZARDOUS WASTES	(2)	EW004566 EW004655
HAZARDS	(1)	EW004516
*HEALTH	(5)	EW004426 EW004498 EW004573 EW004646 EW004788
HEALTH	(2)	EW004502 EW004581

HEALTH EDUCATION (1) EW004683
*HEAT (1) EW004522
*HEAT TREATMENT (1) EW004702
*HEAVY METALS (3) EW004431 EW004461 EW004543
HEAVY METALS (1) EW004816
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HERBICIDES (3) EW004309 EW004668 EW004671
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PHYSIOLOGY (1) EW004373
*IDAHO (1) EW004428
*ILLINOIS (4) EW004312 EW004541 EW004566 EW004812
ILLUSTRATIONS (1) EW004346
*IMPACT ANALYSIS (1) EW004465
*IMPACT EVALUATION (1) EW004473
INCENTIVE GRANTS (1) EW004384
INCENTIVE SYSTEMS (1) EW004384
INCINERATION (1) EW004726
INDEXES (LOCATERS) (1) EW004836
*INDIANA (1) EW004496
INDUSTRIAL EFFLUENTS (1) EW004876
*INDUSTRIAL HYGIENE (1) EW004375
INDUSTRIAL PROCESSES (1) EW004897
INDUSTRIAL SITING (1) EW004577

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 INDUSTRY                         (14)     EW001254  EW004363  EW004406  EW004407  EW004410  EW004412  EW004432
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 INFECTIOUS DISEASES              (1)      EW004876

 INFILTRATION                     (3)      EW004537  EW004651  EW004882

*INFORMATION DISSEMINATION        (1)      EW004836

*INFORMATION PROCESSING           (1)      EW004526

 INFORMATION SERVICES             (1)      EW004589

*INFORMATION SOURCES              (3)      EW004409  EW004589  EW004749

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*INJECTION CHEMICALS              (1)      EW004667

 INSECTICIDES                     (2)      EW004623  EW004815

*INSPECTION                       (3)      EW004495  EW004786  EW004899

 INSPECTION                       (1)      EW004844

*INSTITUTIONS                     (1)      EW004809

*INSTRUCTION                      (3)      EW004316  EW004601  EW004839

 INSTRUCTION                      (1)      EW004517

*INSTRUCTIONAL FILMS              (1)      EW002297

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 INSTRUCTIONAL STAFF              (1)      EW004838


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*INTERDISCIPLINARY APPROACH (2) EW004391 EW004398
INTERDISCIPLINARY APPROACH (2) EW004322 EW004817

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INTERNATIONAL LAW (4) EW004527 EW004529 EW004530 EW004531
*INTERNATIONAL PROGRAMS (5) EW004500 EW004527 EW004529 EW004530 EW004531
INTERNATIONAL RELATIONS (4) EW004527 EW004529 EW004530 EW004531
*INTERNATIONAL STUDIES (1) EW004652
*INTERSTATE PROGRAMS (1) EW004592
ION EXCHANGE (1) EW004355
*ION SELECTIVE MEMBRANES (1) EW004606
*IOWA (1) EW004542
*IRRIGATION (2) EW004554 EW004809
IRRIGATION (3) EW004809 EW004862 EW004895
*IRRIGATION (SPRINKLER) (1) EW004857
IRRIGATION SYSTEMS (1) EW004857
*ISOPHORONE (1) EW004621
JACKSON STATE FOREST (1) EW004332
*JOB SKILLS (10) EW004378 EW004381 EW004382 EW004457 EW004521 EW004575 EW004828
EW004832 EW004834 EW004837
JOB SKILLS (18) EW004346 EW004353 EW004379 EW004517 EW004518 EW004519 EW004520
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JOB TRAINING (1) EW004788

*KENTUCKY (2) EW004331 EW004359
KINETICS (1) EW004398
*KITS (WATER CONSERVATION) (1) EW004694
*LABORATORIES (1) EW004516
*LABORATORIES (WATER) (1) EW004578
*LABORATORY EQUIPMENT (1) EW001394
LABORATORY EQUIPMENT (1) EW004578
*LABORATORY METHODS (1) EW004824
LABORATORY METHODS (1) EW004825

*LABORATORY PROCEDURES (6) EW001394 EW004379 EW004433 EW004516 EW004578 EW004834
LABORATORY PROCEDURES (1) EW004436
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*LAKE ERIE (1) EW004696
*LAKE HURON (1) EW004698
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LAND APPLICATION (2) EW004882 EW004900
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*LAND DRAINAGE (1) EW004394
*LANDFILLS (1) EW004879
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LEAD (1) EW004651
*LEADERSHIP (1) EW004519
LECTURES (2) EW004394 EW004396
LEGAL PROBLEMS (3) EW004384 EW004802 EW004809

*LEGISLATION (5) EW004455 EW004655 EW004802 EW004809 EW004895

LEGISLATION (10) EW004303 EW004335 EW004368 EW004493 EW004506 EW004669 EW004670
EW004767 EW004788 EW004929

*LIQUID ION EXCHANGE (1) EW004583

*LIQUID TREATMENT (1) EW004823

*LITERATURE REVIEWS (3) EW004329 EW004876 EW004883

LITERATURE REVIEWS (1) EW004377

*LIVESTOCK (1) EW004349

*LOCAL GOVERNMENT (2) EW004303 EW004333

*LOGGING (2) EW004305 EW004307

*MAGNESIUM (1) EW004883

*MAINE (1) EW004311

*MAINTENANCE (11) EW001393 EW001395 EW004450 EW004538 EW004539 EW004544 EW004730
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*MAMMALS (2) EW002297 EW004373

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MANPOWER DEVELOPMENT (4) EW004378 EW004379 EW004381 EW004382

MANUALS (3) EW001393 EW004402 EW004610

*MANUFACTURERS (1) EW004494

*MAPS (1) EW004807

*MARINE ENVIRONMENT (1) EW004786

MARINE ENVIRONMENT (1) EW004514
MARSHES (1) EW004559
*MASSACHUSETTS (1) EW004599
MATHEMATICAL APPLICATIONS (1) EW004396
*MATHEMATICAL MODELS (3) EW004393 EW004396 EW004685
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MEASUREMENT TECHNIQUES (4) EW004325 EW004332 EW004407 EW004814

*MECHANICS (PHYSICS) (1) EW004400
MECHANICS (PHYSICS) (1) EW004389
MEDICINE (1) EW004673
*MEETINGS (1) EW004656
MEETINGS (1) EW004372
*MEMBRANE PROCESSES (1) EW004800
*MEMBRANES (1) EW004799
*MERCURY (2) EW004353 EW004647
*METAL INDUSTRY (2) EW004646 EW004648
*METALS (3) EW004606 EW004646 EW004648
METALS (2) EW004412 EW004655
METEROLOGY (1) EW004398
*METERS (1) EW004446
METHANE (1) EW004875

*METRIC SYSTEM (1) EW004574
METROPOLITAN AREAS (1) EW004817

MICROBES (1) EW004876

*MICROBIOLOGY (4) EW004514 EW004578 EW004659 EW004727

MICROBIOLOGY (7) EW004356 EW004581 EW004700 EW004724 EW004750 EW004862 EW004896

MINERALS (1) EW004355

*MIXING (1) EW004657

*MODELS (11) EW004387 EW004388 EW004395 EW004435 EW004548 EW004651 EW004744
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MONITORING (1) EW004468

*MONTANA (2) EW004305 EW004670

MONTANA (1) EW004669

*MOTIVATION (2) EW004517 EW004518

*MOTOR VEHICLES (1) EW004816

*MOUNT HOOD NATIONAL FOREST (1) EW004473

*MUNICIPALITIES (17) EW004352 EW004401 EW004432 EW004540 EW004541 EW004656 EW004698
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MUNICIPALITIES (20) EW001254 EW004366 EW004411 EW004429 EW004431 EW004445 EW004446
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*NAPHTHALENE (1) EW004613

*NATIONAL FORESTS (1) EW004305

NATIONAL FORESTS (2) EW004316 EW004345

*NATURAL RESOURCES (9) EW004377 EW004472 EW004497 EW004498 EW004641 EW004780 EW004781
EW004782 EW004809

NATURAL RESOURCES (28) EW004345 EW004385 EW004390 EW004398 EW004427 EW004496 EW004527
EW004529 EW004530 EW004531 EW004551 EW004556 EW004572 EW004589 EW004739
EW004771 EW004779 EW004784 EW004785 EW004787 EW004788 EW004795 EW004796
EW004815 EW004819 EW004821 EW004822 EW004891

*NEEDS ASSESSMENT (2) EW004591 EW004651

*NETWORK ANALYSIS (1) EW004411

NEW ENGLAND RIVER BASIN COMMISSION (NERBC) (1) EW004822

*NEW HAMPSHIRE (1) EW004487
NEW JERSEY (1) EW004485
*NEW YORK (2) EW004307 EW004486
NEW YORK (2) EW004322 EW004696
NITRATES (2) EW004606 EW004607
*NITRIFICATION (2) EW004607 EW004724
*NITROGEN (1) EW004808
NITROGEN (2) EW004651 EW004724
*NITROGEN REMOVAL (1) EW004798
*NITROPHENOLS (1) EW004615
*NOISE (1) EW004502
*NOISE POLLUTION (2) EW004417 EW004468
NOISE POLLUTION (1) EW004409

*NONPOINT POLLUTION (1) EW004306
NONPOINT POLLUTION (1) EW003574
*NONPOINT POLLUTION SOURCES (11) EW004310 EW004311 EW004312 EW004313 EW004326 EW004328 EW004329
EW004331 EW004332 EW004333 EW004349

*NONPOINT SOURCE POLLUTION (24) EW004309 EW004314 EW004322 EW004325 EW004335 EW004348 EW004383
EW004477 EW004478 EW004479 EW004483 EW004484 EW004485 EW004486 EW004487
EW004488 EW004489 EW004554 EW004592 EW004644 EW004652 EW004662 EW004665
EW004739
NONPOINT SOURCE POLLUTION (7) EW004394 EW004491 EW004661 EW004663 EW004666 EW004667 EW004668
*NONPOINT SOURCES (4) EW004303 EW004304 EW004305 EW004306
NONPOINT SOURCES (4) EW003574 EW004316 EW004554 EW004604
NONPRINT MEDIA (1) EW004779
*NORTH CAROLINA (1) EW004488
*NUTRIENTS (1) EW004862
NUTRIENTS (3) EW004325 EW004326 EW004383
*NUTRITION (1) EW004498
OCCUPATIONAL DISEASES (1) EW004375

*OCEANOLOGY (5) EW004524 EW004559 EW004614 EW004621 EW004844
OCEANOLOGY (6) EW004525 EW004611 EW004619 EW004620 EW004623 EW004786

*OCEANS (1) EW004546

*ODOR (1) EW004656

*OHIO (4) EW004378 EW004379 EW004381 EW004483

OIL (1) EW004514

*OIL SPILLS (1) EW001397

*ON-SITE DISPOSAL (1) EW004882

ON-SITE MANAGEMENT (1) EW004900

*ONSITE SEWAGE TREATMENT (1) EW004877

*ONSITE SYSTEMS (WASTEWATER) (1) EW004358

*ON-SITE TREATMENT (1) EW004900

ON-SITE WASTEWATER TREATMENT (1) EW004788

OPEN REACTORS (1) EW004884

*OPERATIONS (1) EW004582

OPERATIONS ANALYSIS (1) EW004444

*OPERATIONS (DRINKING WATER) (1) EW004538

OPERATIONS (DRINKING WATER) (1) EW004539

*OPERATIONS (INDUSTRIAL) (1) EW004577

*OPERATIONS (LOGGING) (15) EW004306 EW004311 EW004332 EW004348 EW004473 EW004474 EW004475
EW004477 EW004479 EW004484 EW004485 EW004486 EW004487 EW004489 EW004661

OPERATIONS (LOGGING) (8) EW004310 EW004312 EW004314 EW004325 EW004328 EW004478 EW004488
EW004663

OPERATIONS (SOLID WASTE) (1) EW004726

*OPERATIONS (WASTEWATER) (43) EW001393 EW001394 EW001395 EW004356 EW004401 EW004413 EW004420
EW004421 EW004429 EW004430 EW004434 EW004444 EW004448 EW004451 EW004452
EW004453 EW004454 EW004455 EW004456 EW004457 EW004493 EW004494 EW004503
EW004505 EW004544 EW004545 EW004549 EW004672 EW004676 EW004723 EW004724
EW004727 EW004748 EW004750 EW004798 EW004808 EW004875 EW004884 EW004905
EW004906 EW004907 EW004929 EW004930

OPERATIONS (WASTEWATER) (6) EW004376 EW004402 EW004432 EW004543 EW004702 EW004747

*OPERATIONS (WATER) (18) EW000493 EW004352 EW004382 EW004421 EW004438 EW004439 EW004440
EW004441 EW004442 EW004443 EW004445 EW004446 EW004447 EW004458 EW004494
EW004509 EW004549 EW004906

OPERATIONS (WATER)	(3)	EW004358 EW004376 EW004703
OPERATIONS (WATER SUPPLY)	(1)	EW004693
*OPERATIONS (WATER TREATMENT)	(10)	EW000469 EW004378 EW004379 EW004381 EW004541 EW004696 EW004698 EW004699 EW004701 EW004725
OPERATIONS (WATER TREATMENT)	(5)	EW004540 EW004542 EW004546 EW004695 EW004697
*OPERATORS (WATER)	(1)	EW004428
OPERATOR TRAINING	(4)	EW004378 EW004379 EW004381 EW004382
*ORECON	(3)	EW004473 EW004661 EW004664
*ORGANIC CHEMISTRY	(2)	EW004363 EW004514
ORGANIC CHEMISTRY	(9)	EW004412 EW004612 EW004613 EW004615 EW004616 EW004618 EW004619 EW004620 EW004621
ORGANIC CHEMSITRY	(1)	EW004617
*ORGANIC COMPOUNDS	(1)	EW004363
*ORGANIC POLLUTANTS	(2)	EW004461 EW004462
*ORGANICS	(3)	EW004579 EW004581 EW004750
ORGANICS	(1)	EW004460
ORSANCO	(1)	EW004579
*OSMOSIS	(1)	EW004800
*OXIDATION	(1)	EW004437
*OXIDATION DITCHES	(1)	EW004545
*OXYGEN	(2)	EW004361 EW004607
*OXYGEN-ACTIVATED SLUDGE	(1)	EW004884
OXYGENATION	(2)	EW004896 EW004897
*OXYGENATION TECHNOLOGY	(1)	EW004884
*OZONATION	(2)	EW004441 EW004456
*OZONE	(2)	EW004456 EW004494
*PACIFIC NORTHWEST	(2)	EW004310 EW004348
*PACIFIC NORTHWEST	(1)	EW004665
PACIFIC NORTHWEST	(1)	EW004663

*PACKAGE PLANTS (WASTEWATER) (1) EW004429
*PARAPROFESSIONAL PERSONNEL (2) EW004730 EW004899
PARAPROFESSIONAL PERSONNEL (3) EW004516 EW004610 EW004723
PARTICULATES (1) EW004816
*PATENTS (1) EW004376
PATHOGENS (1) EW004431
*PENNSYLVANIA (3) EW004335 EW004477 EW004540
PENNSYLVANIA (1) EW004700
PERCOLATION (1) EW004882
*PERFORMANCE (1) EW004748
*PERFORMANCE SPECIFICATIONS (1) EW004790
PERIODICALS (1) EW004515
*PERMITS (1) EW004335
PERMITS (2) EW004909 EW004929
*PERSONNEL (2) EW001394 EW004723
PERSONNEL (2) EW004468 EW004748
*PEST CONTROL (1) EW004498
*PESTICIDES (10) EW002297 EW004309 EW004372 EW004373 EW004418 EW004502 EW004618 EW004619 EW004623 EW004815
PESTICIDES (10) EW004461 EW004498 EW004641 EW004652 EW004662 EW004665 EW004666 EW004667 EW004668 EW004895
*PETROCHEMICALS (1) EW004430
PETROLEUM (1) EW004816
PETROLEUM INDUSTRY (1) EW004514
PHASE EQUILIBRIUM (1) EW004728
*PHENOL (1) EW004612
PHOSPHATES (1) EW004606
*PHOSPHOROUS (3) EW004322 EW004523 EW004548
*PHOSPHORUS (2) EW004896 EW004897
PHOTOCHEMICAL REACTIONS (1) EW004673
PHYSICAL ENVIRONMENT (1) EW004673
PHYSICAL TREATMENT (1) EW001395
PHYSICS (2) EW004390 EW004393

*PHYSIOLOGY	(2)	EW004372	EW004883					
PILOT PLANTS	(3)	EW004699	EW004725	EW004912				
*PIPE FLOW	(1)	EW004744						
*PIPE (POLYVINYL CHLORIDE)	(1)	EW004729						
*PIPES	(6)	EW004369	EW004411	EW004537	EW004541	EW004573	EW004744	
PIPES	(1)	EW001393						
*PLANNING	(46)	EW001394	EW004303	EW004313	EW004333	EW004367	EW004368	EW004385
	EW004390	EW004391	EW004474	EW004475	EW004479	EW004484	EW004496	EW004526
	EW004544	EW004551	EW004553	EW004556	EW004571	EW004577	EW004591	EW004599
	EW004641	EW004644	EW004646	EW004651	EW004652	EW004669	EW004670	EW004749
	EW004760	EW004761	EW004762	EW004764	EW004765	EW004770	EW004771	EW004788
	EW004791	EW004797	EW004809	EW004822	EW004823	EW004912	EW004931	
PLANNING	(35)	EW001257	EW004310	EW004316	EW004335	EW004351	EW004377	EW004383
	EW004393	EW004465	EW004485	EW004486	EW004487	EW004495	EW004520	EW004523
	EW004524	EW004525	EW004547	EW004548	EW004550	EW004554	EW004592	EW004648
	EW004663	EW004692	EW004698	EW004703	EW004787	EW004795	EW004796	EW004819
	EW004821	EW004879	EW004891	EW004926				
PLASTICS	(1)	EW004729						
*PLUMBING	(3)	EW004508	EW004654	EW004826				
PLUMBING	(1)	EW004827						
*POISONS	(1)	EW002297						
*POLICIES	(1)	EW004761						
POLICIES	(2)	EW004802	EW004809					
*POLICY FORMATION	(2)	EW003574	EW004333					
POLICY FORMATION	(2)	EW004525	EW004662					
*POLITICAL ISSUES	(1)	EW004767						
*POLLUTION	(15)	EW001257	EW004390	EW004468	EW004497	EW004500	EW004524	EW004525
	EW004562	EW004575	EW004599	EW004644	EW004647	EW004673	EW004739	EW004891
POLLUTION	(30)	EW003559	EW004363	EW004375	EW004383	EW004409	EW004418	EW004420
	EW004527	EW004529	EW004530	EW004531	EW004550	EW004553	EW004564	EW004565
	EW004651	EW004652	EW004669	EW004670	EW004763	EW004765	EW004815	EW004836
	EW004876	EW004883	EW004926	EW004927	EW004928	EW004929	EW004930	
*POLLUTION ABATEMENT	(1)	EW004909						
*POLLUTION CONTROL	(1)	EW004303						
POLLUTION CONTROL	(4)	EW004313	EW004373	EW004412	EW004909			
POLYCHLORINATED BIPHENYLS	(1)	EW004461						

POPULATION GROWTH (2) EW004497 EW004926
*PORTUGAL (1) EW004384
*POST SECONDARY EDUCATION (40) EW003559 EW004355 EW004357 EW004378 EW004379 EW004381 EW004382
EW004391 EW004392 EW004395 EW004397 EW004408 EW004416 EW004417 EW004418
EW004419 EW004421 EW004422 EW004423 EW004424 EW004425 EW004426 EW004427
EW004420 EW004547 EW004548 EW004574 EW004610 EW004654 EW004661 EW004662
EW004663 EW004664 EW004665 EW004666 EW004667 EW004668 EW004779 EW004786
EW004844
POST SECONDARY EDUCATION (7) EW002297 EW004356 EW004387 EW004388 EW004389 EW004571 EW004573
*POWER GENERATION (1) EW004747
*POWER PLANTS (1) EW004769
*PRECIPITATION (1) EW004896
*PREDICTION (1) EW004768
*PRESSURE (2) EW004906 EW004907
PRESSURE SEWERS (3) EW004877 EW004882 EW004900
*PRESSURE SYSTEMS (1) EW004358
PRETREATMENT (1) EW004412
PRIMARY TREATMENT (1) EW001395
*PROBABILITY THEORY (2) EW004393 EW004764
*PROBLEMS (1) EW004727
*PROCESS CONTROL (1) EW004724
PRODUCTIVITY. (1) EW004857
*PRODUCTIVITY (WORKER) (1) EW004517
PRODUCTIVITY (WORKER) (1) EW004521
*PROFESSIONAL DEVELOPMENT (3) EW004518 EW004521 EW004836
PROFESSIONAL DEVELOPMENT (7) EW004378 EW004379 EW004381 EW004382 EW004837 EW004839 EW004840
PROGRAM ADMINISTRATION (1) EW004788
*PROGRAM DESCRIPTIONS (14) EW004416 EW004417 EW004418 EW004419 EW004420 EW004421 EW004422
EW004423 EW004424 EW004425 EW004426 EW004427 EW004493 EW004538
PROGRAM DESCRIPTIONS (1) EW004457
PROGRAM DEVELOPMENT (1) EW004554
PROGRAM PLANNING (1) EW004575
*PROJECT PLANNING (6) EW004769 EW004795 EW004796 EW004819 EW004821 EW004822
PROJECTS (1) EW004391

*PSYCHOLOGY	(2)	EW004517 EW004519
*PUBLIC HEALTH	(14)	EW000469 EW000884 EW001252 EW001254 EW004359 EW004365 EW004431 EW004575 EW004659 EW004673 EW004692 EW004826 EW004876 EW004883
PUBLIC HEALTH	(47)	EW001256 EW004352 EW004418 EW004438 EW004439 EW004440 EW004441 EW004442 EW004443 EW004444 EW004456 EW004458 EW004498 EW004503 EW004505 EW004533 EW004537 EW004546 EW004611 EW004612 EW004613 EW004614 EW004615 EW004616 EW004617 EW004618 EW004619 EW004620 EW004621 EW004622 EW004623 EW004654 EW004693 EW004703 EW004824 EW004825 EW004827 EW004828 EW004829 EW004830 EW004831 EW004832 EW004833 EW004834 EW004835 EW004900 EW004930
*PUBLIC INVOLVEMENT	(1)	EW004694
PUBLICITY	(1)	EW004931
*PUBLIC LAW 92-500, SECTION 208	(1)	EW004326
*PUBLIC NOTIFICATION	(1)	EW004693
PUBLIC PARTICIPATION	(2)	EW004879 EW004900
*PUBLIC POLICY	(13)	EW003574 EW004384 EW004385 EW004500 EW004551 EW004553 EW004556 EW004641 EW004795 EW004796 EW004819 EW004821 EW004822
PUBLIC POLICY	(2)	EW004550 EW004739
PUBLIC RELATIONS	(1)	EW004468
*PUBLIC WELFARE	(1)	EW004673
*PUMPS	(2)	EW004450 EW004899
PUMPS	(5)	EW001393 EW004411 EW004434 EW004744 EW004832
*PURIFICATION	(1)	EW004546
*PVC PIPE	(1)	EW004729
*QUALITY CONTROL	(1)	EW004578
QUALITY CONTROL	(2)	EW004465 EW004786
*QUANTITATIVE METHODS	(1)	EW004736
*QUESTIONNAIRES	(1)	EW004507
*RADIATION	(1)	EW004422
*RADIOACTIVITY	(2)	EW004409 EW004502
RAINFALL	(2)	EW004651 EW004764
*RANCHING	(1)	EW004785
RANGELAND	(1)	EW004349
READING ASSIGNMENTS	(1)	EW004428
*RECORD KEEPING	(1)	EW004359

RECORD KEEPING	(4)	EW001393 EW004379 EW004516 EW004823
*RECORDS	(3)	EW004359 EW004544 EW004904
RECORDS	(1)	EW004379
*RECREATION	(2)	EW004312 EW004496
RECREATION	(3)	EW004473 EW004659 EW004807
*RECYCLING	(7)	EW001256 EW004423 EW004444 EW004549 EW004791 EW004927 EW004928
RECYCLING	(18)	EW001254 EW004356 EW004460 EW004466 EW004560 EW004577 EW004599 EW004761 EW004768 EW004770 EW004798 EW004799 EW004808 EW004876 EW004909 EW004926 EW004929 EW004930
*RECYCLING (WASTEWATER)	(2)	EW004747 EW004862
*RED CLAY PROJECT.	(1)	EW004592
*REFERENCE COMPOUNDS	(1)	EW004462
*REFERENCE MATERIALS	(3)	EW004389 EW004516 EW004807
REFERENCE MATERIALS	(3)	EW004310 EW004408 EW004608
REFINERIES	(1)	EW004430
*REFORESTATION	(1)	EW004310
REFORESTATION	(1)	EW004665
*REGIONALIZATION	(1)	EW004507
*REGIONAL PLANNING	(12)	EW003574 EW004385 EW004506 EW004527 EW004529 EW004530 EW004531 EW004554 EW004565 EW004739 EW004768 EW004787
REGIONAL PLANNING	(1)	EW004495
*REGULATION	(1)	EW004504
REGULATION	(3)	EW004397 EW004412 EW004656
*REGULATIONS	(6)	EW001397 EW004359 EW004390 EW004566 EW004692 EW004900
REGULATIONS	(6)	EW004305 EW004335 EW004579 EW004655 EW004903 EW004927
*REGULATORS	(1)	EW004766
*RENOVATED WASTES	(1)	EW004876
REPRINTS	(1)	EW004515
*RESEARCH	(43)	EW002759 EW004361 EW004367 EW004368 EW004386 EW004393 EW004394 EW004397 EW004434 EW004435 EW004436 EW004439 EW004440 EW004442 EW004443 EW004454 EW004478 EW004491 EW004507 EW004508 EW004509 EW004514 EW004522 EW004523 EW004525 EW004542 EW004559 EW004583 EW004591 EW004592 EW004604 EW004652 EW004671 EW004697 EW004700 EW004701 EW004771 EW004790 EW004798 EW004799 EW004800 EW004875 EW004930

RESEARCH (25) EW004363 EW004365 EW004372 EW004373 EW004377 EW004400 EW004437
EW004441 EW004444 EW004446 EW004452 EW004453 EW004456 EW004473 EW004481
EW004578 EW004581 EW004606 EW004607 EW004656 EW004694 EW004788 EW004801
EW004808 EW004817

*RESEARCH METHODOLOGY (1) EW004373

RESEARCH METHODOLOGY (2) EW004397 EW004610

*RESEARCH NEEDS (1) EW004330

RESEARCH NEEDS (1) EW004329

*RESEARCH PROJECTS (1) EW004884

*RESEARCH REPORTS (1) EW004748

*RESEARCH REVIEWS (2) EW004326 EW004671

*RESERVOIRS (4) EW004361 EW004495 EW004580 EW004760

RESERVOIRS (2) EW004657 EW004764

RESEVOIR OPERATION (1) EW004770

*RESIDUE TREATMENT (1) EW004310

*RESOURCE CONSERVATION AND RECOVERY ACT (1) EW004566

*RESOURCE GUIDES (1) EW004589

RESOURCE MANAGEMENT (1) EW004891

RETROFITTING (1) EW004903

REUSE (1) EW004549

*REVEGETATION (1) EW004332

*REVERSE OSMOSIS (2) EW004799 EW004800

*RISK ANALYSIS (1) EW004386

*RIVERS (11) EW004357 EW004361 EW004389 EW004390 EW004396 EW004400 EW004465
EW004579 EW004670 EW004671 EW004760

RIVERS (5) EW004397 EW004604 EW004657 EW004659 EW004669

*ROAD CONSTRUCTION (1) EW004306

*ROADS (12) EW004304 EW004305 EW004311 EW004332 EW004345 EW004474 EW004475
EW004479 EW004481 EW004485 EW004486 EW004816

ROADS (5) EW004314 EW004331 EW004484 EW004487 EW004489

*RODENTICIDES (1) EW002297

*RODENTS (1) EW002297

*ROLE MODELS (1) EW004575

*ROLE PERCEPTION (1) EW004575

*ROTATING BIOLOGICAL CONTACTORS	(1)	EW004434
RUBBER	(1)	EW004816
*RUNOFF	(1)	EW004333
RUNOFF	(3)	EW004350 EW004394 EW004483
*RURAL AREAS	(3)	EW001252 EW004672 EW004815
RURAL AREAS	(1)	EW004877
*RURAL DEVELOPMENT	(1)	EW001252
*SAFETY	(8)	EW000493 EW004351 EW004375 EW004495 EW004516 EW004533 EW004564 EW004749
SAFETY	(5)	EW001393 EW004379 EW004537 EW004573 EW004829
SAFETY EDUCATION	(1)	EW004564
*SAFETY EQUIPMENT	(1)	EW004564
*SALINE WATER	(2)	EW004524 EW004591
*SALINITY	(1)	EW004554
*SALT MARSHES	(1)	EW004608
*SAMPLING	(5)	EW004407 EW004502 EW004610 EW004647 EW004736
SAMPLING	(5)	EW004359 EW004363 EW004379 EW004406 EW004465
*SAND FILTRATION	(1)	EW004451
SAN FRANCISCO	(1)	EW004926
*SANITATION	(2)	EW004573 EW004927
SANITATION	(2)	EW004788 EW004905
*SANITATION IMPROVEMENT	(1)	EW004814
SCARIFICATION	(1)	EW004668
*SCHEDULING	(1)	EW004723
SCHEDULING	(1)	EW004931
*SCIENCE EDUCATION	(2)	EW004357 EW004784
SCIENCE EDUCATION	(5)	EW004497 EW004780 EW004781 EW004782 EW004785
*SCIENCES	(2)	EW004365 EW004426
SCIENCES	(2)	EW004361 EW004392
SCIENTIFIC PERSONNEL	(1)	EW004516
*SCIENTISTS	(1)	EW004567
*SEA GRANT	(3)	EW004559 EW004786 EW004844
SECONDARY TREATMENT	(1)	EW001395

*SEDIMENT (1) EW004397
*SEDIMENTATION (7) EW001254 EW004303 EW004306 EW004335 EW004389 EW004400 EW004592
SEDIMENTATION (6) EW000493 EW004325 EW004333 EW004483 EW004489 EW004491
*SEDIMENT CONTROL (2) EW004314 EW004815
*SEDIMENTS (1) EW004329
SEDIMENTS (1) EW004349
*SEDIMENT TRANSPORT (2) EW004389 EW004397
*SEEDING (2) EW004314 EW004491
SEEPAGE (1) EW004350
SEISMOLOGY (1) EW004328
*SELECTIVE ION ELECTRODE (1) EW004901
*SEMINARS (3) EW004465 EW004524 EW004525
*SEPTAGE DISPOSAL (1) EW004882
*SEPTAGE TREATMENT (1) EW004882
SEPTIC SYSTEMS (1) EW004877
*SEPTIC TANKS (2) EW004763 EW004788
SEPTIC TANKS (1) EW004882
*SEWAGE (6) EW004607 EW004798 EW004802 EW004817 EW004823 EW004876
SEWAGE (6) EW004356 EW004545 EW004791 EW004800 EW004900 EW004927
SEWAGE DISPOSAL (1) EW004895
*SEWAGE MICROBIOLOGY (1) EW004897
*SEWAGE SYSTEMS (1) EW004768
*SEWER PIPE (1) EW004729
*SEWERS (10) EW004358 EW004537 EW004605 EW004729 EW004765 EW004766 EW004814
EW004817 EW004882 EW004896
SEWERS (5) EW004651 EW004770 EW004770 EW004877 EW004900

*SILVICULTURE (9) EW004305 EW004309 EW004312 EW004325 EW004331 EW004665 EW004666
EW004667 EW004668
SILVICULTURE (4) EW004332 EW004473 EW004479 EW004484
*SIMULATION (3) EW004651 EW004760 EW004770
SIMULATION (2) EW004387 EW004388

SITE ANALYSIS (1) EW004788
*SITE ASSESSMENT (1) EW004303
SITE SELECTION (1) EW004879
SITKA SPRUCE (1) EW004348
SKID TRAILS (1) EW004479
*SKILL DEVELOPMENT (3) EW004837 EW004839 EW004840
SKILL DEVELOPMENT (1) EW004838
SLASH DISPOSAL (1) EW004348
SLIDE TAPES (2) EW004786 EW004844
*SLUDGE (13) EW004431 EW004452 EW004466 EW004543 EW004583 EW004599 EW004702 EW004724 EW004726 EW004823 EW004879 EW004884 EW004927
SLUDGE (9) EW001395 EW004448 EW004787 EW004875 EW004900 EW004905 EW004909 EW004928 EW004929
SLUDGE TREATMENT (3) EW001393 EW004702 EW004876
*SMALL FLOWS (1) EW004882
*SOCIAL FACTORS (1) EW004307
*SOCIAL INFLUENCES (1) EW004809
SOCIAL PLANNING (1) EW004809
SOCIAL RESPONSIBILITIES (1) EW004521
SOCIAL SCIENCES (1) EW004551
SODIUM (1) EW004883
*SOIL (1) EW004478
SOIL CONSERVATION (1) EW004398
SOIL EROSION (1) EW004306
*SOIL MECHANICS (1) EW004729
SOILS (8) EW004313 EW004410 EW004477 EW004488 EW004729 EW004787 EW004788 EW004882
*SOIL SCIENCE (2) EW004350 EW004601
SOLIDS (1) EW004816
*SOLID WASTES (6) EW000884 EW004409 EW004423 EW004468 EW004726 EW004927
SOLID WASTES (7) EW001254 EW004466 EW004651 EW004747 EW004909 EW004912 EW004926
*SOUTH CAROLINA (1) EW004692
*SOUTH DAKOTA (1) EW004701
SPECTROSCOPY (2) EW004353 EW004515

SPRAYING (2) EW004662 EW004665
*SPRINGS (1) EW004833
*STABILIZATION LAGOONS (1) EW001253
*STABILIZATION PONDS (2) EW004413 EW004435
*STANDARDS (15) EW004375 EW004459 EW004578 EW004611 EW004613 EW004614 EW004615
EW004616 EW004617 EW004618 EW004619 EW004621 EW004622 EW004790 EW004929
STANDARDS (11) EW004326 EW004351 EW004384 EW004401 EW004495 EW004533 EW004612
EW004669 EW004670 EW004692 EW004895

*STARTUP (1) EW001395
STATE GOVERNMENT (3) EW004589 EW004761 EW004895
*STATE IMPLEMENTATION PLANS (1) EW004692
STATE LEGISLATION (5) EW004527 EW004529 EW004530 EW004531 EW004900

*STATE-OF-THE-ART REVIEWS (2) EW004729 EW004788
*STATE-OF-THE-ART-REVIEWS (1) EW004523
STATE-OF-THE-ART REVIEWS (2) EW004797 EW004817
STATE-OF-THE-ART-REVIEWS (1) EW004383
*STATE PLANS (4) EW004485 EW004486 EW004489 EW004566
STATE PLANS (2) EW004487 EW004488
*STATE PROGRAMS (2) EW001397 EW004692
STATE PROGRAMS (1) EW004428
*STATE STANDARDS (1) EW004359
*STATEWIDE PLANNING (3) EW004304 EW004328 EW004335
STATEWIDE PLANNING (1) EW004305
*STATISTICAL ANALYSIS (5) EW004386 EW004387 EW004388 EW004392 EW004736
*STATISTICS (3) EW004392 EW004393 EW004408
STATISTICS (4) EW004387 EW004388 EW004398 EW004700
*STOCHASTIC METHODS (4) EW004387 EW004388 EW004392 EW004408
STOCHASTIC MODELS (1) EW004768
*STOCHASTIC TECHNIQUES (1) EW004393
*STORM DRAINS (1) EW004605
*STORM RUNOFF (3) EW004366 EW004605 EW004816

STORM SEWERS (1) EW004817
STORMWATER (1) EW004789
*STORMWATER STORAGE (1) EW004676
*STREAMBANK PROTECTION (1) EW004492
STREAM CHANNELIZATION (1) EW004389
*STREAMS (4) EW004487 EW004492 EW004663 EW004801
STREAMS (2) EW004397 EW004662
*STREET SURFACE CONTAMINANTS (1) EW004816
*SUPERVISION (5) EW004517 EW004518 EW004519 EW004520 EW004521
*SURCHARGES (1) EW004432
*SURFACE RUNOFF (5) EW004767 EW004789 EW004797 EW004815 EW004817
SURFACE RUNOFF (5) EW004652 EW004764 EW004766 EW004812 EW004816
SURFACE WATERS (1) EW004895
*SURVEYS (8) EW004394 EW004541 EW004578 EW004651 EW004656 EW004693 EW004694 EW004767
SURVEYS (4) EW004322 EW004551 EW004739 EW004748
SWAMPS (1) EW004559
*SWAMPS (CYPRESS) (1) EW004604
*SYMPOSIA (7) EW004313 EW004363 EW004372 EW004406 EW004407 EW004567 EW004655
SYSTEM DESIGNS (2) EW004896 EW004897
*SYSTEMS ANALYSIS (3) EW004395 EW004725 EW004789
*SYSTEMS APPROACH (1) EW004768
SYSTEMS APPROACH (1) EW004823
*SYSTEMS CONCEPTS (1) EW004395
SYSTEMS DEVELOPMENT (1) EW004395
*TANKS (CIRCULAR) (1) EW004539
*TANKS (STEEL) (1) EW004571
TASK ANALYSIS (4) EW004837 EW004838 EW004839 EW004840
*TASTE (1) EW004656
*TASTE-AND-ODOR CONTROL (1) EW004542
TAXES (1) EW004763
*TEACHING EXPERIENCE (3) EW004837 EW004838 EW004840
TEACHING EXPERIENCE (1) EW004839

*TEACHING METHODS (1) EW004601
*TECHNICAL EDUCATION (1) EW004571

TECHNICAL EDUCATION (8) EW004654 EW004661 EW004662 EW004663 EW004665 EW004666 EW004667
EW004668

TECHNICAL MATHEMATICS (1) EW004396

TECHNICIANS (1) EW004346

*TECHNOLOGICAL ADVANCEMENT (1) EW004460

TECHNOLOGICAL ADVANCEMENT (4) EW004500 EW004696 EW004697 EW004701

*TECHNOLOGY (30) EW004352 EW004355 EW004358 EW004361 EW004365 EW004376 EW004389
EW004402 EW004409 EW004410 EW004425 EW004436 EW004437 EW004438 EW004439
EW004441 EW004447 EW004448 EW004456 EW004493 EW004494 EW004537 EW004554
EW004562 EW004591 EW004702 EW004726 EW004790 EW004817 EW004836

TECHNOLOGY (44) EW004367 EW004368 EW004377 EW004385 EW004390 EW004411 EW004412
EW004428 EW004442 EW004444 EW004446 EW004448 EW004451 EW004453 EW004481
EW004500 EW004503 EW004504 EW004505 EW004538 EW004540 EW004545 EW004546
EW004549 EW004582 EW004655 EW004656 EW004672 EW004727 EW004728 EW004809
EW004824 EW004825 EW004826 EW004827 EW004828 EW004829 EW004830 EW004831
EW004832 EW004833 EW004834 EW004835 EW004929

*TEMPERATURE (3) EW004522 EW004545 EW004907

TEMPERATURE (1) EW004326

*TERTIARY SEWAGE TREATMENT (1) EW004896

TERTIARY TREATMENT (1) EW001254

*TERTIARY WASTEWATER TREATMENT (1) EW004897

TESTING (1) EW004729

*TEXTILE INDUSTRY (1) EW004912

*THERMAL DESTRUCTION (1) EW004726

THERMAL ENVIRONMENT (1) EW004522

*THERMAL POLLUTION (1) EW004745

*TIDAL MARSHES (1) EW004559

*TIMBER (1) EW004345

*TIMBER HARVESTING (1) EW004328

TOPOGRAPHIC MAPS (1) EW004328

*TOXAPHENE (1) EW004623

TOXICANTS (1) EW004373
*TOXICOLOGY (5) EW004372 EW004373 EW004407 EW004418 EW004673

TOXICOLOGY (15) EW004309 EW004611 EW004612 EW004613 EW004614 EW004615 EW004616
EW004617 EW004618 EW004619 EW004620 EW004621 EW004622 EW004623 EW004883

*TOXIC SUBSTANCES (20) EW004375 EW004412 EW004455 EW004461 EW004533 EW004564 EW004611
EW004612 EW004613 EW004614 EW004615 EW004616 EW004617 EW004618 EW004619
EW004620 EW004621 EW004622 EW004623 EW004673

TOXIC SUBSTANCES (2) EW004655 EW004891

*TOXINS (1) EW003559

TRACE ANALYSIS (INORGANICS) (1) EW004606

*TRADEOFFS (1) EW004345

TRAFFIC (1) EW004816

*TRAINING (13) EW004416 EW004417 EW004418 EW004419 EW004420 EW004421 EW004422
EW004423 EW004424 EW004425 EW004427 EW004517 EW004771

TRAINING (5) EW004426 EW004518 EW004520 EW004521 EW004575

*TRAINING PROGRAMS (8) EW004378 EW004379 EW004381 EW004382 EW004428 EW004457 EW004730
EW004899

*TRAINING TECHNIQUES (4) EW004837 EW004838 EW004839 EW004840

*TRANSPORTATION. (1) EW004749

TRANSPORTATION (2) EW004304 EW004816

*TRANSPORT SYSTEMS (2) EW004474 EW004475

*TREATMENT (1) EW004786

TREATMENT SCHEMES (1) EW004909

*TRIHALOMETHANES (1) EW004701

TRIHALOMETHANES (1) EW004542

TURBIDITY (3) EW004696 EW004698 EW004699

*ULTRASONICS (1) EW004814

UNDER GRADUATE STUDY (1) EW004357

*UNSTEADY FLOW (1) EW004396

*URBAN AREAS (11) EW004368 EW004395 EW004605 EW004641 EW004651 EW004763 EW004765
EW004767 EW004797 EW004816 EW004823

URBAN AREAS (2) EW004817 EW004877

URBAN DRAINAGE (1) EW004605

*URBAN ENVIRONMENT (5) EW004330 EW004366 EW004651 EW004761 EW004780

URBAN ENVIRONMENT (4) EW004763 EW004765 EW004781 EW004927
*URBAN EXTENSION (1) EW004763
URBAN EXTENSION (1) EW004767
URBAN PLANNING (1) EW004891
URBAN PROBLEMS (1) EW004644
*USER CHARGES (1) EW004432
*UTILITIES (17) EW004359 EW004419 EW004421 EW004446 EW004458 EW004506 EW004507 EW004508 EW004522 EW004538 EW004540 EW004580 EW004695 EW004723 EW004825 EW004829 EW004830
UTILITIES (41) EW004352 EW004369 EW004395 EW004401 EW004402 EW004411 EW004432 EW004447 EW004448 EW004449 EW004459 EW004466 EW004505 EW004537 EW004542 EW004578 EW004694 EW004701 EW004725 EW004726 EW004761 EW004765 EW004770 EW004771 EW004809 EW004817 EW004826 EW004828 EW004831 EW004832 EW004833 EW004834 EW004835 EW004876 EW004895 EW004903 EW004904 EW004905 EW004926 EW004927 EW004928
*UTILITIES (ELECTRIC) (1) EW004747
*UTILITIES (WATER) (3) EW004541 EW004579 EW004656
*VACUUM BREAKERS (1) EW004573
VACUUM SEWERS (1) EW004877
VALUES (1) EW004762
*VALVES (2) EW004730 EW004744
VALVES (1) EW004766
*VEGETABLES (1) EW004909
*VEGETATION COVER (1) EW004492
*VERMONT (1) EW004306
*VERMONT (BENNINGTON) (1) EW004703
VIDEOTAPE CASSETTES (2) EW004730 EW004899
*VIRGINIA (1) EW004489
*VIRUSES (1) EW004876
VISUAL AIDS (1) EW004601
VOCATIONAL EDUCATION (2) EW004730 EW004899
*WASHINGTON (1) EW004492
WASHINGTON D.C. (1) EW004770
WASHINGTON, D.C. (1) EW004816
*WASTE DISPOSAL (37) EW000884 EW001252 EW001256 EW001257 EW004348 EW004356 EW004358 EW004401 EW004410 EW004413 EW004420 EW004430 EW004431 EW004466 EW004500 EW004543 EW004565 EW004566 EW004599 EW004644 EW004646 EW004648 EW004655

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                              EW004669  EW004672  EW004702  EW004726  EW004763  EW004765  EW004770  EW004787
                              EW004823  EW004905  EW004926  EW004927  EW004928  EW004930

*WASTE DISPOSAL               (3)       EW004747  EW004788  EW004814

 WASTE DISPOSAL               (32)      EW001254  EW004365  EW004421  EW004461  EW004468  EW004502  EW004504
                              EW004527  EW004529  EW004530  EW004531  EW004564  EW004652  EW004670  EW004761
                              EW004766  EW004768  EW004769  EW004771  EW004789  EW004790  EW004791  EW004798
                              EW004799  EW004800  EW004801  EW004802  EW004808  EW004817  EW004862  EW004879
                              EW004900

 WASTE DISPOSAL               (2)       EW001253  EW004797

*WASTES                       (6)       EW004349  EW004412  EW004423  EW004646  EW004648  EW004876

 WASTES                       (17)      EW004348  EW004356  EW004383  EW004409  EW004460  EW004504  EW004543
                              EW004599  EW004644  EW004652  EW004702  EW004727  EW004862  EW004884  EW004905
                              EW004929  EW004930


*WASTES DISPOSAL              (1)       EW004929

*WASTES (SOLID)               (1)       EW004726

*WASTEWATER                   (1)       EW004876

 WASTEWATER                   (5)       EW004363  EW004372  EW004409  EW004504  EW004897

 WASTEWATER.                  (1)       EW004891

*WASTEWATER COLLECTION        (1)       EW004672

 WASTEWATER COLLECTION        (1)       EW004651

*WASTEWATER DISPOSAL          (1)       EW004877

 WASTEWATER DISPOSAL          (1)       EW004882

*WASTEWATER TREATMENT         (87)      EW000884  EW001253  EW001254  EW001256  EW001257  EW001393  EW001394
                              EW001395  EW001397  EW004330  EW004353  EW004356  EW004358  EW004363  EW004365
                              EW004369  EW004401  EW004402  EW004412  EW004413  EW004420  EW004421  EW004429
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                              EW004906  EW004907  EW004909  EW004912  EW004927  EW004928  EW004929  EW004930

*WASTEWATER TREATMENT.        (5)       EW001252  EW004724  EW004727  EW004808  EW004862

 WASTEWATER TREATMENT         (8)       EW004431  EW004544  EW004578  EW004607  EW004644  EW004676  EW004723
                              EW004802


*WATER CONSERVATION           (1)       EW004791

 WATER CONSERVATION           (6)       EW004795  EW004796  EW004819  EW004821  EW004822  EW004909

*WATER CYCLE                  (1)       EW004784
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*WATER DISTRIBUTION                      (7)       EW004367  EW004378  EW004459  EW004538  EW004541  EW004744  EW004904
 WATER DISTRIBUTION                      (1)       EW004573

*WATERFRONT STRUCTURES                   (2)       EW004786  EW004844

*WATER HARDNESS                          (1)       EW004883

*WATER LAW                               (1)       EW004895

*WATER METERS                            (2)       EW004446  EW004459

*WATER POLLUTION                         (2)       EW004877  EW004912

 WATER POLLUTION                         (1)       EW004926

*WATER POLLUTION CONTROL                 (85)      EW001257  EW001397  EW003574  EW004305  EW004306  EW004309  EW004310
                                         EW004311  EW004312  EW004314  EW004322  EW004335  EW004353  EW004363  EW004365
                                         EW004366  EW004368  EW004372  EW004383  EW004390  EW004401  EW004402  EW004409
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                                         EW004468  EW004493  EW004500  EW004504  EW004522  EW004523  EW004525  EW004527
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                                         EW004565  EW004573  EW004599  EW004607  EW004611  EW004612  EW004613  EW004614
                                         EW004615  EW004617  EW004620  EW004621  EW004622  EW004623  EW004644  EW004651
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                                         EW004766  EW004797  EW004799  EW004800  EW004802  EW004808  EW004815  EW004816
                                         EW004828  EW004891  EW004895  EW004896  EW004897  EW004909

*WATER POLLUTION CONTROL                 (19)      EW004326  EW004367  EW004407  EW004412  EW004465  EW004502  EW004514
                                         EW004646  EW004647  EW004648  EW004672  EW004676  EW004736  EW004745  EW004767
                                         EW004790  EW004798  EW004801  EW004837

 WATER POLLUTION CONTROL                 (72)      EW000884  EW003559  EW004325  EW004331  EW004332  EW004333  EW004348
                                         EW004349  EW004350  EW004356  EW004361  EW004384  EW004387  EW004388  EW004392
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                                         EW004452  EW004453  EW004458  EW004479  EW004481  EW004483  EW004484  EW004488
                                         EW004489  EW004494  EW004496  EW004497  EW004503  EW004505  EW004524  EW004526
                                         EW004537  EW004540  EW004547  EW004548  EW004616  EW004618  EW004619  EW004641
                                         EW004657  EW004661  EW004662  EW004761  EW004763  EW004769  EW004771  EW004788
                                         EW004789  EW004807  EW004817  EW004824  EW004835  EW004876  EW004882  EW004926
                                         EW004927

 WATER POLLUTION CONTROL                 (23)      EW004329  EW004352  EW004369  EW004506  EW004702  EW004748  EW004768
                                         EW004787  EW004791  EW004825  EW004826  EW004827  EW004829  EW004830  EW004831
                                         EW004832  EW004833  EW004834  EW004836  EW004838  EW004839  EW004840  EW004930

*WATER POLLUTION CONTROL FEDERATION      (1)       EW004460

 WATER PROCESSING SYSTEM                 (1)       EW004549

 WATER PROJECTS                          (5)       EW004795  EW004796  EW004819  EW004821  EW004822

*WATER QUALITY                           (64)      EW004304  EW004306  EW004307  EW004309  EW004312  EW004313  EW004322
                                         EW004325  EW004326  EW004329  EW004331  EW004333  EW004345  EW004349  EW004352
                                         EW004361  EW004363  EW004368  EW004458  EW004460  EW004461  EW004465  EW004484
                                         EW004488  EW004508  EW004525  EW004554  EW004579  EW004580  EW004592  EW004604
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                                         EW004693  EW004697  EW004698  EW004699  EW004700  EW004701  EW004703  EW004765
                                         EW004783  EW004787  EW004797  EW004826  EW004827  EW004895  EW004896  EW004897
                                         EW004928

*WATER QUALITY                           (4)       EW004310  EW004376  EW004489  EW004761
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WATER QUALITY	(38)	EW001256	EW004305	EW004330	EW004332	EW004335	EW004355	EW004383
	EW004401	EW004428	EW004433	EW004436	EW004455	EW004462	EW004474	EW004478
	EW004479	EW004485	EW004486	EW004487	EW004523	EW004567	EW004581	EW004654
	EW004662	EW004663	EW004692	EW004695	EW004760	EW004769	EW004779	EW004799
	EW004802	EW004807	EW004876	EW004883	EW004891	EW004909	EW004912	
WATER QUALITY	(6)	EW004366	EW004402	EW004475	EW004606	EW004607	EW004623	
*WATER RESOURCES	(87)	EW003574	EW004313	EW004316	EW004330	EW004350	EW004357	EW004359
	EW004367	EW004384	EW004385	EW004386	EW004387	EW004388	EW004390	EW004392
	EW004393	EW004394	EW004397	EW004398	EW004399	EW004400	EW004419	EW004428
	EW004444	EW004465	EW004466	EW004472	EW004485	EW004486	EW004487	EW004488
	EW004492	EW004495	EW004504	EW004524	EW004527	EW004530	EW004540	EW004546
	EW004547	EW004550	EW004551	EW004553	EW004556	EW004559	EW004567	EW004572
	EW004577	EW004591	EW004608	EW004652	EW004659	EW004662	EW004663	EW004669
	EW004692	EW004694	EW004760	EW004761	EW004764	EW004765	EW004767	EW004770
	EW004771	EW004781	EW004782	EW004783	EW004791	EW004795	EW004796	EW004797
	EW004802	EW004807	EW004809	EW004817	EW004819	EW004821	EW004822	EW004833
	EW004835	EW004895	EW004904	EW004905	EW004926	EW004928	EW004929	EW004930
*WATER RESOURCES	(14)	EW004306	EW004377	EW004491	EW004496	EW004523	EW004525	EW004526
	EW004529	EW004531	EW004779	EW004780	EW004784	EW004785	EW004901	
WATER RESOURCES	(52)	EW000469	EW001256	EW004305	EW004307	EW004310	EW004322	EW004326
	EW004329	EW004363	EW004366	EW004378	EW004379	EW004381	EW004382	EW004383
	EW004389	EW004396	EW004408	EW004468	EW004473	EW004477	EW004478	EW004498
	EW004522	EW004539	EW004541	EW004548	EW004571	EW004579	EW004599	EW004604
	EW004641	EW004664	EW004670	EW004671	EW004672	EW004696	EW004697	EW004698
	EW004699	EW004700	EW004766	EW004787	EW004788	EW004789	EW004790	EW004799
	EW004800	EW004801	EW004808	EW004812	EW004815			
WATER RESOURCES	(6)	EW004484	EW004497	EW004657	EW004661	EW004701	EW004739	
*WATER RIGHTS	(1)	EW004895						
*WATER RUNOFF	(1)	EW004651						
*WATERSHEDS	(7)	EW004325	EW004357	EW004394	EW004396	EW004397	EW004400	EW004671
*WATERSHEDS	(6)	EW004389	EW004399	EW004547	EW004548	EW004664	EW004812	
WATERSHEDS	(2)	EW004316	EW004592					
WATERSHEDS	(1)	EW004663						
*WATER STORAGE	(1)	EW004571						
*WATER SUPPLY	(37)	EW000469	EW000493	EW004352	EW004359	EW004365	EW004368	EW004369
	EW004378	EW004381	EW004395	EW004411	EW004437	EW004442	EW004446	EW004447
	EW004449	EW004458	EW004459	EW004506	EW004507	EW004508	EW004538	EW004539
	EW004541	EW004571	EW004573	EW004580	EW004654	EW004692	EW004693	EW004694
	EW004695	EW004700	EW004764	EW004770	EW004904	EW004928		
*WATER SUPPLY	(2)	EW004696	EW004744					
WATER SUPPLY	(8)	EW004330	EW004350	EW004367	EW004385	EW004440	EW004443	EW004556

EW004760
WATER SUPPLY (2) EW004769 EW004771
*WATER TREATMENT (51) EW000469 EW000493 EW004330 EW004352 EW004355 EW004363 EW004365
EW004378 EW004379 EW004381 EW004382 EW004419 EW004421 EW004428 EW004437
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EW004824 EW004899 EW004903 EW004906
WATER TREATMENT (3) EW004578 EW004580 EW004644
*WATER TUNNELS (1) EW004765
*WATER USE (1) EW004694
*WATER USE (3) EW004572 EW004577 EW004807
WATER USE (1) EW004764
*WEED CONTROL (1) EW004671
*WEEDS (1) EW004671
*WELLS (1) EW004504

WESTERN HEMLOCK (1) EW004348
*WETLANDS (1) EW004472
*WETLANDS (3) EW004567 EW004604 EW004608
WILDLIFE (1) EW004477
*WILDLIFE MANAGEMENT (1) EW004373
WILDLIFE MANAGEMENT (1) EW004307
WIND EROSION (1) EW004483
WISCONSIN (1) EW004882
*WOOD (2) EW004786 EW004844
*WOODLANDS (1) EW004314
*WOODLOTS (1) EW004311
*WORK ENVIRONMENT (1) EW004351
*WORK ENVIRONMENT (3) EW004518 EW004519 EW004521
WORK ENVIRONMENT (1) EW004520
WORK ENVIRONMENT (1) EW004517
*WORKING HOURS (1) EW004723
*WORKSHOPS (2) EW004316 EW004329

*WORLD PROBLEMS (1) EW004659

*ZOOLOGY (1) EW004373
ZOOLOGY (1) EW004372

*208 PLANS (2) EW004313 EW004488
208 PLANS (2) EW004305 EW004484